



# AGRICULTURAL OUTLOOK

September 1987

Economic Research Service  
United States Department of Agriculture

How Much Farmland  
Do Lenders Hold?

# AGRICULTURAL OUTLOOK

September 1987/AO-134



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# In Brief . . . News of Farm Income, Loan Losses, Beef Consumption

The financial stress experienced by the farm sector during the early 1980's is moderating. Estimates of lenders' potential losses on farm loans peaked at \$8.6 billion in 1985 and are forecast to drop to \$4 billion in 1987 (loan loss is measured by unpaid interest and asset losses through forced sales of financially stressed commercial farms).

Lenders now hold nearly 8 million acres of farmland acquired through foreclosure and bankruptcy. This is less than 1 percent of all farmland, and about 24 percent of annual farmland sales. Although these holdings could be put on the market all at once, lenders are reluctant to sell the holdings rapidly lest prices fall. In addition, improving rates of return on land used for farming could boost values.

The value of the farm sector's real estate assets is stabilizing, and equity values may be edging up as farm income is buoyed by increases in Federal payments and reductions in cash expenses. Many farmers are paying off debts and acquiring less new short-term debt than in the past. But continued foreclosures and debt restructuring indicate that not all farmers are sharing in the recovery.

Nominal 1987 net cash income for farmers could be a record \$54 to \$58 billion, compared with 1986's \$52 billion. Cash income is being driven by sharp declines in production expenses and continued growth in direct Federal payments, which more than offset persistent slippage in receipts from crop marketings. Adjusted for inflation, however, 1987 net cash income is anticipated to remain around one-tenth below the 1970's average and likely will be down slightly from 1986.

Total red meat and poultry disappearance is expected to increase nearly 3 percent in 1988, to about 222 pounds per capita. Lower grain prices and positive returns are encouraging continued expansion in poultry and pork production, and an end to breeding herd liquidation for cattle. Per capita



meat supplies have been record large or near-record since 1982. Continued big supplies will mean lower poultry and pork prices in 1988, and very little gain in beef prices.

Cattle producers and others in the beef industry are concerned about weak beef demand. Economic analysis suggests that the most important factor decreasing beef consumption was the residual trend, which is associated with changing consumer tastes and other factors. This trend would have accounted for a consumption decline of more than 30 percent between 1972 and 1984 if prices, income distribution, and other factors had been constant. Lower prices for pork and broilers further decreased beef demand.

U.S. wheat production in 1987/88 is expected to be up 2 percent from last season to 2.13 billion bushels, despite a 9.5-percent drop in planted area. The crop will be larger primarily because of a sharp jump in winter wheat yields. This season's corn, grain sorghum, and soybean yields are estimated to be record highs, partially offsetting significant declines in plantings.

The world outlook for major crops in 1987/88 is again dominated by large production and stocks and low prices. Cotton and rice are the major exceptions, with production lagging use and prices stronger.

Worldwide use of wheat for feed increased over the past decade. Abundant supplies, and attractive prices relative to feed grains, led to a surge in wheat feeding during 1986/87. Although wheat is mostly used as a food grain, an average of 19 percent of the world's wheat use during the past 5 years was for feed. The USSR accounts for more than 40 percent of feed wheat use. Worldwide use of wheat for feed will slip only a little in 1987/88.

The 1985 farm act provided for discretionary marketing loans for wheat, feed grains, and soybeans, but they have not been implemented for several reasons. Marketing loans for these crops could be very costly. Moreover, for wheat and feed grains, such loans likely would not enhance competitiveness more than other program options already have, including generic certificates, the Export Enhancement Program, and lower support levels.

Groundwater in nearly half the counties in the United States is subject to contamination by pesticides, fertilizer, or both. More than 50 million people who live in the affected regions rely on groundwater for drinking. Contamination can persist for years, even centuries, after the cause has been corrected.

Economic stress has caused hardships in many third world countries. Since these countries have been major importers of grains and oilseeds, their financial problems have also caused hardships for farmers in countries that export to them, including the United States. Developed-country assistance for economic expansion in the third world, including U.S. aid, will stimulate the volume of world agricultural trade. U.S. policies are positioned to restore the lost U.S. share of this trade.





## Agricultural Economy

World population passed 5 billion this year. There is something about passing a round number like this that catches our attention. In this case, it calls to mind the thoughts that Thomas Robert Malthus had nearly two centuries ago about how the population tended to outrun the food supply. It makes us ask: How can we feed 5 billion people?

The population is several times larger now than it was in Malthus' day, yet agricultural production per capita has increased. Just in the past decade, when world population increased 16 percent, world agricultural production increased 19 percent. So far, as the world has produced more mouths to feed, farmers have found ways to produce more for them. What about future expansion in population and agricultural production?

### *Near-Term Population Growth Is 1.6 Percent a Year*

During the 1960's, world population was growing at a pace of over 2 percent per year. It has slowed since. Demographers predict that during the next couple of centuries population may not pass about 25 percent more people than are on the planet now. In the shorter run, population will increase at about 1.6 percent per year, so world agricultural output will need to continue increasing for some time to come at that rate or more. Can we do it?

Global food production has increased at an annual average of nearly 2.4 percent since 1950, a year when world population was just half what it is now. Even the regions with the least excess capacity, that is, the less developed countries, have expanded their capacity to produce food, through resource development, technological advances, and structural change. However, the developing nations' populations also grew faster than world population, so they gained little on a per capita basis. Their farm output expanded about 2.9 percent per year, but their population grew 2.4 percent annually.

The centrally planned countries expanded agricultural production at a similar pace, although during the past decade China's growth has accelerated while that of the USSR has slowed. Production per capita in the centrally planned countries has increased by more than 1 percent per year since 1950.

The developed countries tend to have the greatest excess capacity and therefore the greatest ability to expand food production. However, their output grew at a slower rate, a little under 2 percent per year. Among the developed countries, Canada's growth has accelerated recently while that of Japan, which has no excess capacity, has nearly leveled off.

Agricultural growth over the past few decades suggests, as it has ever since Malthus' gloomy predictions, that production can keep up with or even pull ahead of population growth. In fact, food production can grow more slowly in the next few decades than it did during the last few and still keep well ahead of population growth.

Farmers keep learning new ways of doing things and continue to develop natural and human resources to match growth in demand for farm products. As long as we maintain and improve the natural resource and technological base we now have, and do not degrade the environment, farmers can probably find ways to maintain or increase per capita production, if returns are attractive.

## *Distribution Is the Problem*

The difficulty with the global food situation appears to be not how big a pie we can bake, but how to cut and share the pieces. Shortly after Malthus pointed to the Irish potato famines as an illustration of how the population kept outrunning the food supply, Henry George noted that Irish farmers could about double potato production as population doubled.

The Irish famines came because, in periods of bad weather and reduced production, the landlords took their share first and left little for the growers. Thus, growers had no incentive to produce a surplus because the landlords would just take that, too. George said it was a problem of institutional arrangements, not of production potential.

What George said then may still apply now. We can probably continue to produce enough to feed everyone on the planet, but we have trouble finding a way to distribute what we grow so that everyone gets a fair share of food and at the same time the growers and handlers can realize a profit comparable to that earned in other industries.

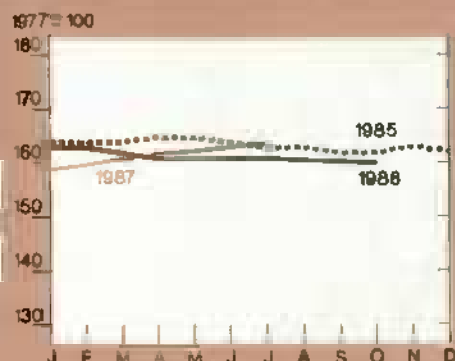
We have seen, through the cost-price squeeze that hurt farmers this decade, just how important it is that farmers grow and sell food at a reasonable profit. Farmers all around the world must face two facts. One is that it is technically possible for them to produce more than they are now producing. The other is that the markets for farm products are inelastic.

An inelastic market means that when farmers put more food on the market and push prices down, prices tend to fall faster than sales rise, so total revenues fall. It is always possible for farmers to produce so much that the market-clearing price will not bring in enough revenue to provide a profit.

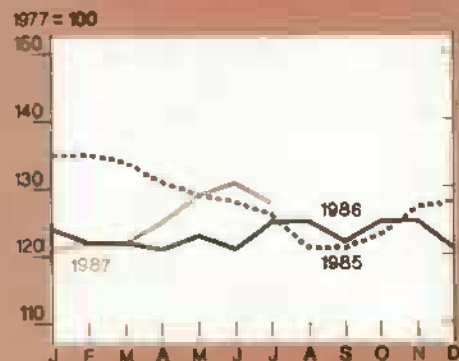
As world population growth slows, and as farmers around the world find more ways to increase their capacity to produce, the twin problems of food distribution and reasonable returns to farming will take precedence over concerns about how to feed another few billion people. [Clark Edwards (202) 786-3313]

# Prime Indicators of the U.S. Agricultural Economy

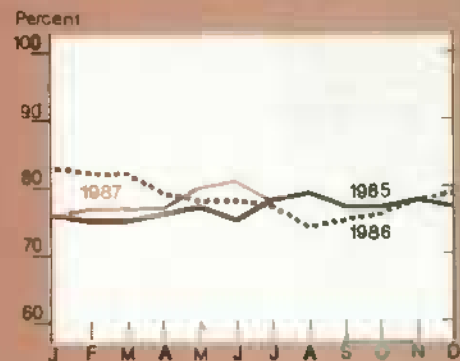
Index of prices paid by farmers<sup>1</sup>



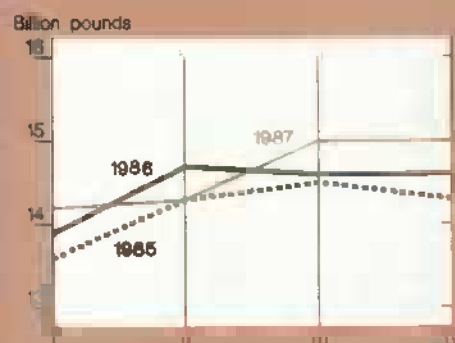
Index of prices received by farmers<sup>2</sup>



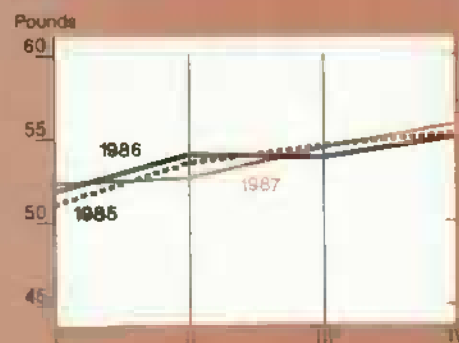
Ratio of prices received to prices paid



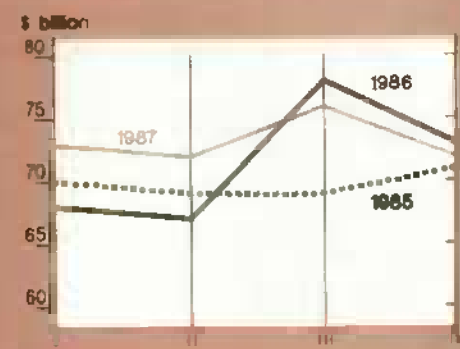
Red meat & poultry<sup>3</sup>  
production



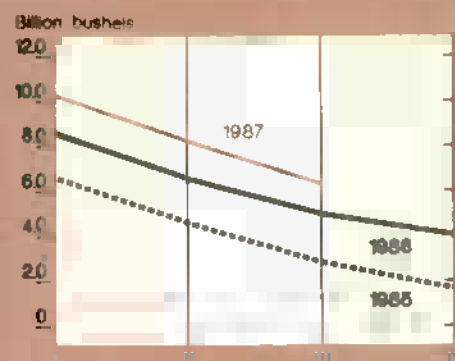
Red meat & poultry  
consumption, per capita<sup>3,4</sup>



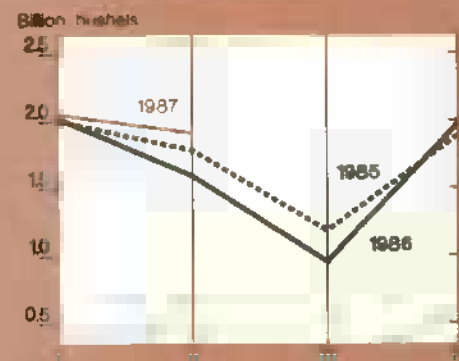
Cash receipts from  
livestock & products<sup>5</sup>



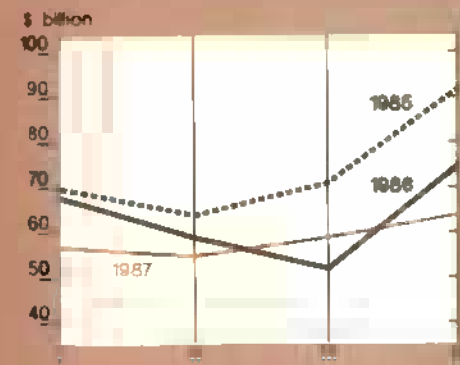
Corn beginning stocks<sup>6</sup>



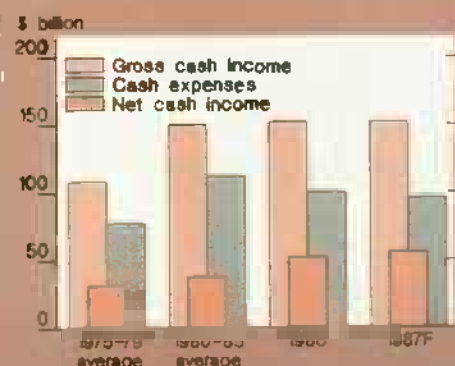
Corn disappearance<sup>6</sup>



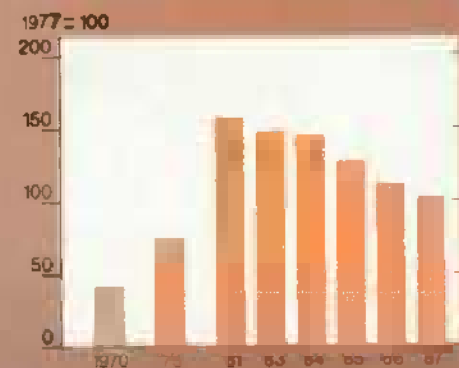
Cash receipts from crops<sup>5</sup>



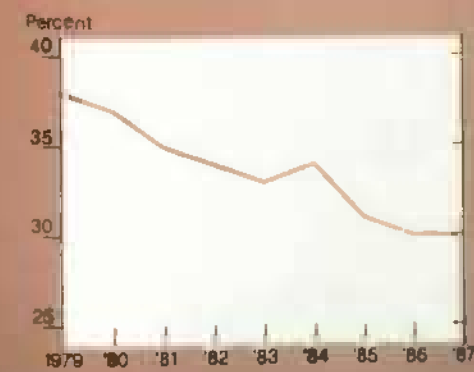
Farm net cash income



Farm real estate values



Farm value/retail food costs



<sup>1</sup>For commodities and services interest, taxes and wages. Beginning in 1986, data are only available quarterly. <sup>2</sup>For all farm products.

<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight. <sup>5</sup>Seasonally adjusted annual rate.

<sup>6</sup>I = Dec.-Feb., II = Mar.-May, III = June-Aug., IV = Sept.-Nov.

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## LIVESTOCK OVERVIEW

Total red meat and poultry disappearance is expected to increase nearly 3 percent in 1988, to about 222 pounds per capita. Lower grain prices and positive returns are encouraging continued expansion in poultry and pork production, and an end to breeding herd liquidation for cattle.

Per capita meat supplies have been record large or near-record since 1982. Continued big supplies will mean lower poultry and pork prices in 1988, and very little gain in beef prices.

Per capita retail pork disappearance is likely to reach 63 pounds in 1988, up from 59 this year and last. Per capita beef disappearance reached 80 pounds in 1986. However, reduced herd liquidation in 1987 and 1988 is expected to lower disappearance to 76 and 73 pounds, respectively. Fed beef supplies likely will remain near the high levels of recent years. Greatest reductions will continue in nonfed beef supplies—hamburger and processed meats.

Among poultry products, the sharpest year-to-year increases per person are likely in turkey. Turkey probably will climb 12 percent in 1987 and 9 percent in 1988. While turkey production increases are likely to slow in 1988, large beginning stocks in cold storage will keep per capita supplies bigger than in 1987.

Broiler supplies may rise about 8 percent this year and 5 percent next. Positive returns in 1986 and 1987, helped by low feed costs, likely will result in continued expansion despite lower prices.

### Hog Prices High

Hog prices at the seven major markets averaged \$61.85 per cwt in July, one of the highest monthly figures since August 1986, when the record was \$63.39. This higher price resulted from a very tight supply of red meats beginning in the spring—a 7-percent decline in pork production, low frozen pork stocks, and an 8-percent decline in beef production.

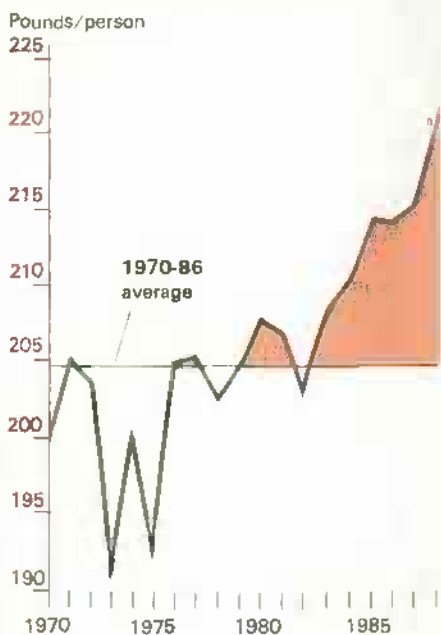
As pork production picks up during the third quarter, prices are expected to slip but still average in the middle \$50's per cwt. In the fall, prices may drop to the middle \$40's, as increased pork production has to compete with double-digit expansion in poultry output. In addition, burdensome turkey stocks are expected to pressure hog prices.

Composite retail pork prices averaged \$1.84 a pound in first-half 1987, up 11 percent from a year earlier. The farm-to-retail price spread averaged 99 cents a pound, up 6 percent from a year earlier, and net farm value rose 16 percent.

Third-quarter retail prices likely will average near the second quarter's \$1.83 a pound. In the fourth quarter, prices may edge down to the middle \$1.70's, as pork production rises from a year earlier and frozen turkey stocks become burdensome.

For all of 1987, retail pork prices are expected to average slightly above 1986's \$1.79 a pound. With the expected increase in pork production in 1988, retail prices next year may recede 5 to 9 percent from 1987. Lower prices likely will be absorbed at the farm level. The farm-to-retail price spread is likely to widen next year, perhaps running 3 to 7 percent higher. Price spreads this year will probably average 2 to 4 percent higher than last.

Consumption of Red Meat & Poultry  
Forecast Record High for 1988



Frozen pork stocks totaled 189 million pounds on June 30, down 24 percent from a year earlier and the lowest in recent years. Although stocks of all cuts except loins were lower than last year, the sharpest decline was in hams.

June ham stocks increased slightly over May's, but were 53 percent below June 30, 1986. Frozen bellies in storage this June 30 totaled 47.4 million pounds, 23 percent below last year.

Low pork production and high prices in the second quarter, along with the expectation of increasing production in the second half, gave little incentive to store pork products for the third and fourth quarters. Despite the low ham stocks, seasonal price rises likely will be moderate.

### Broiler Production Soaring

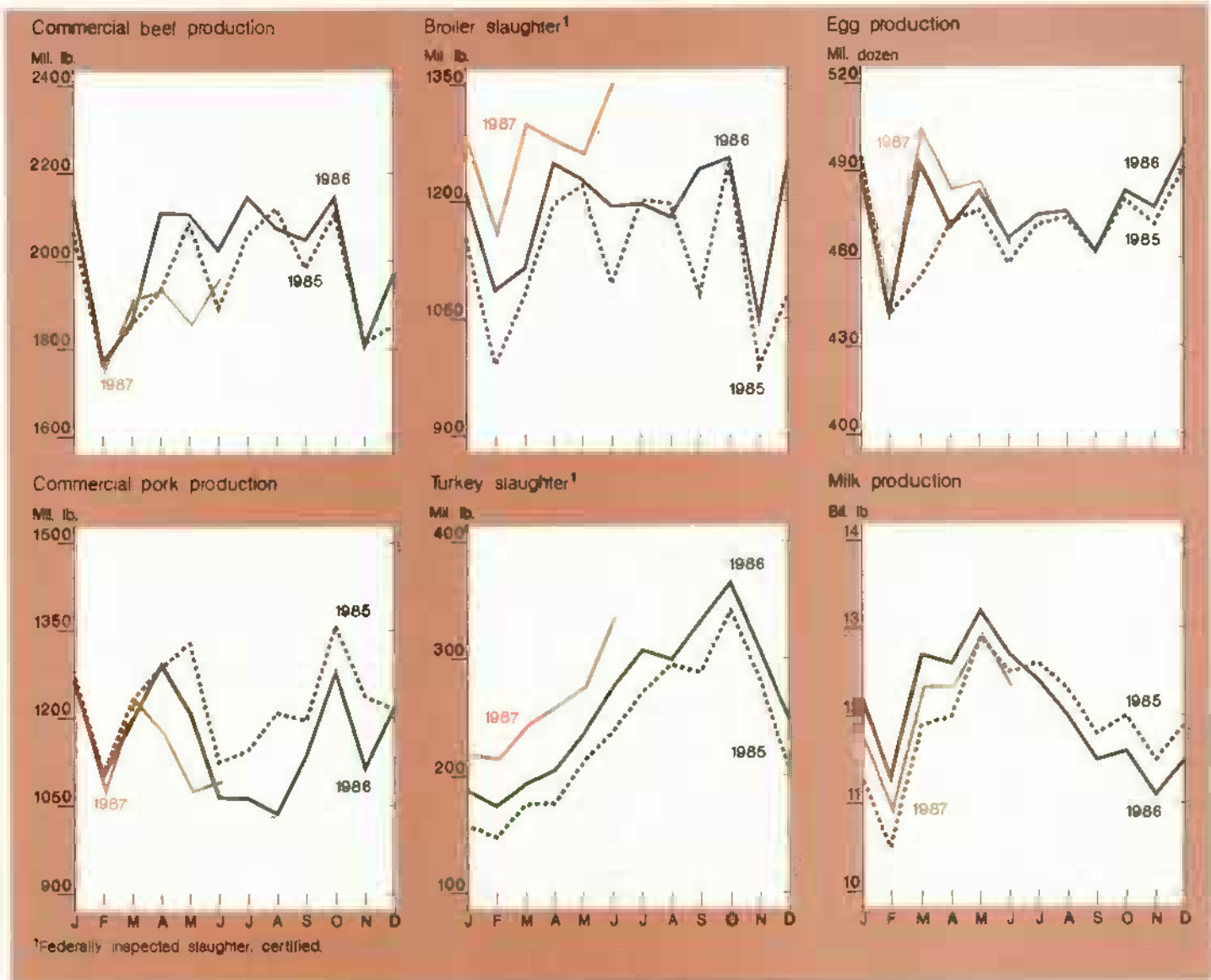
Broiler slaughter in first-half 1987 is estimated more than 8 percent above last year. Broiler chicks hatched during April-June were 7 percent above the same period last year, indicating that third-quarter production likely will be 7-8 percent greater than last year.

Estimated cumulative placements in the broiler hatchery supply flock through January 1988 will be about 14 percent above the previous year, indicating that production will continue to increase. However, June's chick pullet placements in the broiler hatchery supply flock were only 3 percent greater than the year before (in contrast to second-quarter placements, which were up more than 12 percent). The 3-percent figure indicates a slowing in the rate of production increase during 1988. Production in 1988 is expected to be around 5 percent over 1987.

The 12-city composite price for whole broilers in July averaged 47 cents per pound, up 1.5 cents from June but still below the second-quarter average of 48 cents. With continuing large broiler supplies, summer prices are expected to be 45 to 47 cents per pound. Prices in October-December could be 42 to 46 cents, down from 56 for the same period last year.



# Production of Livestock and Products



Broiler exports during January-May were 22 percent over the same period last year. They are expected to be up more than 32 percent for this year as a whole. Sales are higher to Japan, Canada, Egypt, and Iraq. Egypt's and Iraq's purchases are directly linked to the Export Enhancement Program.

## Turkey Totals Take Off

Turkey slaughter in January-June was 20 percent over first-half 1986. June poult placements for slaughter were 16 percent above a year earlier. Placements in February-June averaged 16 percent above the same period last year, indicating second-half production may be 15 percent over 1986.

Total production for 1987 is expected to be up 17 percent from 1986. Production next year may climb only 6 percent from 1987, because of expected producer losses during third-quarter 1987.

Cold storage holdings of turkey on July 1 were 27 percent more than in 1986. The 378-million-pound stock entering the third quarter is the largest in recent history. Fourth-quarter beginning stocks also are predicted to be the largest for that quarter in recent history—about 600 million pounds, or 17 percent larger than in 1986. The high stocks are expected to hold third- and fourth-quarter turkey prices below those of a year earlier.

July hen turkey prices in the Northeast averaged about 56 cents per pound, down from 78 last year. Third-quarter prices are expected to be 55-57 cents and fourth-quarter prices 56-60. Last year, prices were 80 and 78 cents in the third and fourth quarters, respectively.

## Egg Prices Slipping

Egg prices in 1987 are expected to be below 1986 as production expands. Production in the first 6 months of 1987 was 1.1 percent higher than the same period last year, although long-term per capita consumption continues

to trend downward. Egg producers likely will have enough hens laying in the summer and fall to increase total production 1 percent over a year ago. Production for 1988 is expected to be down 0.5 percent from this year, in response to expected producer losses in the third quarter of 1987.

In July, cartoned grade A large eggs in New York averaged 59 cents per dozen, down from 73 cents a year before. The second-quarter average price was just below 59 cents. Prices in the third quarter likely will be 59-61 cents, down from 73 in 1986. Fourth-quarter prices are expected to run 63-67 cents per dozen as holiday cooking increases demand.

Egg exports during January-May were 4 percent below the same period the year before, but May exports were up 8 percent from May 1986. Forecasts call for 3 percent more trade in 1987, as the less expensive U.S. dollar and the Export Enhancement Program make U.S. egg purchases more attractive.

### ***Cattle on Feed Are Up***

This year's calf crop is estimated at 40.7 million head, 1 percent below a year ago and the smallest since 1961. Feeder cattle supplies on July 1 were down 5 percent. But, heifer retention remains relatively low, freeing up heifers for feedlot placement.

Feeder calf supplies on July 1 were down 2 percent, while yearlings declined 11 percent. Stocker-feeder cattle continue to be kept grazing longer than normal to increase sale weight. With forage abundant and large supplies of competing meats holding down fed cattle prices over the next couple of years, the long-grazing trend is likely to continue.

The cost of forage in many areas is very low. Millions of acres will go unused or at least underused this year because of reduced cattle numbers. However, stiff competition for the smaller supply of lighter weight stocker cattle may make it difficult for feedlots to break even when the cattle are marketed. They will be paying more for feeder cattle relative to expected prices for finished beef.

Second-quarter net placements in the 13 quarterly reporting States, at 5.5 million head, were the largest since spring 1972, when nearly 5.9 million were placed. Placements this summer are likely to be well below near-record placements last summer.

Fed cattle marketings during the spring quarter were 3 percent below spring 1986; marketings were sharply lower in May. May marketings in the seven monthly reporting States were down 7 percent from a year before, but June marketings were 3 percent above a year earlier.

Cattle on feed July 1 in the 13 States rose 9 percent above last year's low level. Feedlot movement remains ahead of schedule, but marketings will increase. Producers indicated intentions of marketing 4 percent more cattle this summer than a year ago.

The time cattle are kept on feed will return to more normal lengths, so the larger number of cattle on feed will be fed to heavier slaughter weights. Weights remain below year-earlier levels, however. With low feed costs, lower fed cattle prices, and continued high feeder cattle prices, marketing weights will rise to near a year earlier. This again creates the possibility of slower marketings and resultant price discounts to move supplies, particularly as the volume of competing meats begins to gain in late summer.

Sharp reductions in red meat supplies this spring increased the Choice beef retail price to \$2.49 a pound in June and raised the spring quarter average to \$2.43. The monthly price was the highest since July 1982, and the quarterly price the highest since first-quarter 1984. The farm-to-retail spread widened to \$1.01 a pound in June, as the eight-market steer price averaged \$70.29 per cwt. This put the spread slightly below a year earlier and below first-quarter 1987.

As fed cattle prices decline through fall, lower retail prices are more likely than a wider marketing spread. This will help beef compete against expanding supplies of other meats. Retail beef prices in 1987 are expected to average about 4 percent above last year's \$2.31. Prices in 1988 will be about 1 percent above this year.

### ***Dairy Prices Rising***

Wholesale dairy product prices have begun to reflect declines in milk production and increases in commercial

use. Butter prices were the first to move, rising sharply in June. In early August, the price of Grade AA butter in Chicago was only slightly below the price at which Government stocks are available to the industry. Butter prices may rise an additional few cents in coming months, but most of the seasonal increase is past.

American cheese prices edged up as Government purchases slipped to low early-summer levels. Cheese prices had risen 1-2 cents per pound by early August. Further increases are likely as milk markets tighten seasonally. The seasonal rise is expected to be similar to that of a year earlier. However, slightly tighter conditions could generate much larger jumps because of low commercial cheese stocks.

Nonfat dry milk prices barely rose. However, early-August dry buttermilk prices were up more than 20 cents per pound from spring, while dry whey prices were record high. Additionally, some nonfat dry milk prices rose significantly, even though benchmark prices increased only fractionally. These signs of strength in the solids-not-fat markets indicate a better balance than in several years. Even so, increases in nonfat dry milk prices probably will be modest unless cheese prices jump.

Wholesale price strength was reflected in prices of milk for manufacturing. The Minnesota-Wisconsin (M-W) price was \$11.17 per cwt in July, up a dime from both June and a year earlier. The M-W price, the benchmark for most farm milk prices, probably will post a seasonal rise similar to or slightly smaller than a year earlier. Larger increases are possible if cheese prices rise sharply.

**For further information, contact:**  
Leland Southard, hogs; Mark Weimar or Larry Witucki, broilers, turkeys, and eggs; Ronald Gustafson, cattle; and James Miller, dairy. All are at (202) 786-1830.



## FIELD CROPS OVERVIEW

The world outlook for major crops in 1987/88 is again dominated by large production and stocks and low prices. Cotton and rice are the major exceptions, with production lagging use and prices stronger. World grain trade will expand in 1987/88, continuing the recovery that began in 1986/87, but cotton trade may drop slightly.

### *Late Monsoon Threatens Crops In Southern Asia*

A late and weak monsoon is causing serious damage to 1987/88 crops in southern Asia, so lower production is now expected for both Thailand and India. Monsoon rains, which normally begin in early June in southern India and then spread into the northwest by the end of the month, have been erratic. While rains picked up in eastern and central India, they still had not reached northwestern India by early August, and temperatures in the region have been unusually high.

The Indian rice crop was affected by drought and is forecast to total only 53 million tons, down 12 percent from last year; coarse grain production likely will drop by 8 percent. The impact of the drought extends to oilseeds and cotton, and crop estimates have been lowered.

India has been the world's leading producer of peanuts, and much of this production is located in the driest areas. While it is early in the season, the estimates of 1987/88 peanut production slipped from 6.5 to 5 million tons. Timely post-monsoon rains could improve conditions, but continuation of the hot and dry weather would lead to further substantial deterioration in the grain and oilseed outlook.

While sharp reductions in grain production would ordinarily lead to a rapid rise in grain imports, no impact on trade is expected this year. Indian wheat and rice stocks at the beginning of 1987/88 are estimated to total more than 23 million tons, well above the Government's target and more than enough to cover any production shortfalls. But, with edible oil production dropping, larger imports of vegetable oils appear certain. Most of the increase probably will be palm and rapeseed oil, which are preferred to soybean oil for cooking.

Thailand's 1987/88 corn crop is expected to total only 3 million tons, the smallest since 1978 and 1.1 million below last year's drought-reduced level. The rice crop is expected to drop sharply to 11.6 million tons, 1.4 million below last year.

These smaller crops will cut sharply into Thai export availabilities. Corn exports may drop to 1.5 million tons in 1987/88, the lowest for the last 10 years. Rice exports will also drop by 19 percent to 3 million tons, the least since calendar 1979.

### *U.S. Wheat Output Up, Rice Down*

U.S. wheat production in 1987/88 is expected to be up 2 percent from last season to 2.13 billion bushels, despite a 9.5-percent drop in planted area. The crop will be larger primarily because of a sharp jump in the average winter wheat yield—from 1986/87's drought-reduced 35.2 bushels per acre to this season's estimate of 40 bushels. The yield estimate for other spring wheat, 35.1 bushels, approaches the 1985 record of 35.4.

A 2.13-billion-bushel wheat crop would put the U.S. supply for 1987/88 at 3.96 billion, down slightly from 1986/87. Total disappearance is expected to be up modestly from a year ago to 2.23 billion bushels, because of a 22-percent jump in exports to 1.23 billion and a slight rise in food, seed, and industrial use to 830 million. About half of 1987/88's wheat exports are expected to be made through the Export Enhancement Program. Do-

mestic wheat feed use, however, is forecast to fall 55 percent to 175 million bushels.

The slightly smaller supply and higher total use are expected to lower U.S. wheat carryout to 1.73 billion bushels, equivalent to 77 percent of anticipated annual use. This is down slightly from 83 percent in 1986/87. Farm prices are expected to be above the \$2.28 support level during most of 1987/88, averaging from \$2.30 to \$2.60 a bushel.

This season's U.S. rice crop, at about 128 million cwt, is forecast to be 5 percent smaller than 1986/87's. The smaller total will be due to a 2.4-percent drop in plantings and a yield of 5,496 pounds an acre, down from last season's record of 5,648. Disease problems in Arkansas reduced the yield, and could adversely affect the quality of its rice.

The combination of a lower domestic supply and higher total use for rice is projected to leave U.S. ending stocks fairly tight in 1987/88, particularly for long grain rice. Both domestic use and exports are expected to rise slightly, reducing carryout 56 percent to 26 million cwt, or 16 percent of anticipated annual use. Domestic farm prices in 1987/88 should range from \$3.60 to \$4.40 a cwt, compared with an estimated \$3.80 in 1986/87.

### *World Wheat Production Is Down*

Despite problems in southern Asia, the world will harvest very large crops of

U.S. Field Crop Production

Crop	Unit	1984	1985	1986	1987	1986-87 percent change
<b>Food grains</b>						
Wheat	Bil. bu.	2.59	2.43	2.09	2.12	1.8
Winter	Bil. bu.	2.06	1.83	1.52	1.57	3.2
Durum	Bil. bu.	0.10	0.11	0.10	0.10	0.6
Other spring	Bil. bu.	0.43	0.48	0.47	0.46	-2.1
Rice	Mil. cwt.	138.8	134.9	134.4	127.8	-4.9
<b>Feed grains</b>						
Corn	Bil. bu.	9.61	11.11	10.19	8.90	-12.6
Grain sorghum	Bil. bu.	7.67	8.88	8.25	7.23	-12.4
Barley	Bil. bu.	0.87	1.12	0.94	0.76	-19.5
Oats	Bil. bu.	0.60	0.59	0.61	0.52	-15.1
		0.47	0.52	0.38	0.39	2.2
<b>Other</b>						
Soybeans	Bil. bu.	1.86	2.10	2.01	2.00	-0.3
Peanuts	Bil. lbs.	4.41	4.12	3.70	4.15	12.1
Cotton	Mil. bales	12.98	13.43	9.78	12.91	31.9

Cumulative Generic Certificate Exchanges as of August 12, 1987

Commodity 1/	CCC Inventory	Producer loans	Total
<b>Food grains</b>			
Wheat			
Volume (mil. bu.)	196.9	357.7	554.6
Value (\$ mil.)	479.4	870.9	1,350.3
Rice			
Volume (mil. cwt.)	36.1	0.03	36.1
Value (\$ mil.)	123.2	0.11	123.4
<b>Feed grains</b>			
Corn			
Volume (mil. bu.)	160.9	3,259.5	3,420.5
Value (\$ mil.)	267.0	5,407.3	5,674.3
Grain sorghum			
Volume (mil. bu.)	45.4	137.9	183.2
Value (\$ mil.)	78.3	238.1	316.4
Barley			
Volume (mil. bu.)	34.3	88.0	122.4
Value (\$ mil.)	44.9	115.2	160.1
Cotton			
Volume (mil. bales)	0.85	9.75	6.60
Rye, oats, soybeans			
Value (\$ mil.)	10.2	23.5	33.7
<b>Total value (\$ mil.) 2/</b>	<b>1,003.0</b>	<b>6,655.1</b>	<b>7,658.1</b>

1/ Other program commodities, for which few or no exchanges have been made, include honey, nonfat dry milk, butter, and cheese. 2/ Does not include values for cotton exchanges.

Source: Agricultural Stabilization and Conservation Service, USDA.

wheat and rice in 1987/88 (table 26). In a change from the 1986/87 pattern, U.S. output will rise slightly while production in the rest of the world drops. Production will be slightly below use of food grains, so the buildup of global stocks underway since 1981/82 will end.

The world's 1987/88 wheat crop is expected to total 509 million tons, down 20 million from 1986/87 but the third largest on record. Utilization may drop somewhat because of smaller crops in the Soviet Union and elsewhere and because feed wheat use is expected to slip from 1986/87 (see Commodity Spotlights). Despite this falloff, world wheat utilization remains the second biggest on record. World trade is expected to expand nearly 6 million tons to 96 million (July-June, excluding intra-EC trade).

The 1987/88 foreign wheat crop is projected at 452 million tons, the second largest on record but 4.5 percent less than last year. A smaller Soviet crop accounts for most of the decline, although production will be smaller for several competitors, especially Canada and Australia.

Soviet grain crop prospects have improved. A total grain crop of 205 million tons is now projected for the year, 10 million tons above earlier estimates and only 5 million tons below last year's very good crop.

A dry fall, harsh winter, and late spring cut production of winter wheat sharply, but not by as much as earlier estimated. While the wheat crop is expected to fall 14 million tons, the USSR's wheat imports are likely to rise only 2.5 million tons to a total of 19 million. This would represent about 20 percent of world trade in wheat (excluding intra-EC trade). A large part of the Soviet wheat crop is used for feed, and larger corn and barley crops this year will cushion the impact of lower wheat production.

Growing imports in the USSR and China account for most of the increase expected in world wheat trade in 1987/88. The recovery of U.S. wheat exports will continue, and shipments are projected to total 1,225 million bushels (33.3 million tons), up 221 million bushels from last year. Australia's exports will be down because of a smaller crop, but large stocks will per-

mit Canadian exports to remain big even though the crop is down.

The Export Enhancement Program and credit guarantees again will be critical for the gains expected in U.S. sales. The European Community countered the EEP-led rebound in U.S. sales to North Africa with new initiatives in Latin America, which led to new U.S. EEP initiatives for Brazil and Columbia.

### World Rice Crop Smaller

Lower Indian and Thai production will mean that world rice production in 1987/88 will drop by 6 million tons, rather than increasing to a record as expected earlier. But this 1-percent drop is small and the world crop of 460 million tons remains very big. Output in China, the world's largest producer, is projected to rise nearly 3 percent.

The smaller Thai rice crop and reduced Thai export abilities will mean tight supplies of long grain rice in world markets during 1987/88. This will contribute to a drop in world trade in calendar 1988 to a projected 11 million tons, the lowest level in the past decade. U.S. exports are expected to rise 200,000 tons to 2.6 million tons during 1988 (from 80 to 82 million cwt in the 1987/88 marketing year). U.S. supplies of long grain rice are limited and export gains will have to come primarily in the medium and short grain categories.

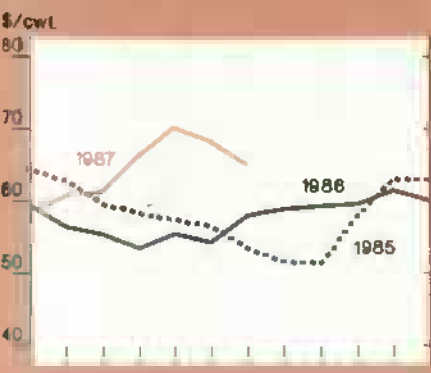
### World Coarse Grain Trade Up Modestly

The world's 1987/88 crop of coarse grains will be large at 836 million tons, but down 3 percent from 1986/87. The U.S. harvest will drop again because of lower area, but a second consecutive foreign record is projected. A strong gain in world coarse grain consumption is expected. Consumption is likely to exceed production for the second time since 1980/81.

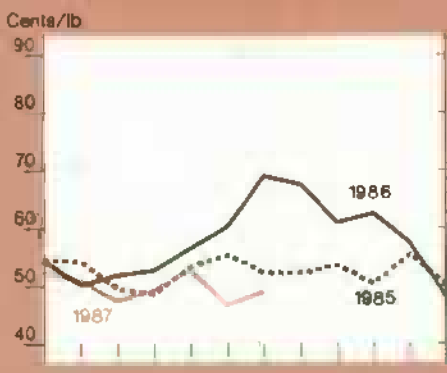
Thus, coarse grain ending stocks will drop for the first time since 1983/84, when the U.S. PIK program cut world stocks by half. Nevertheless, carryover for 1987/88 will remain very large at 204 million tons, and the ratio of stocks to consumption is expected to show only a moderate drop from the record 27 percent projected for 1986/87.

Commodity Market Prices

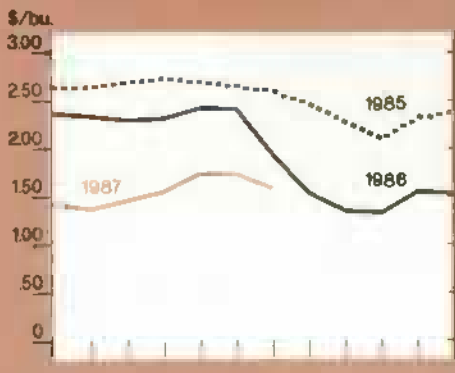
Choice steers, Omaha



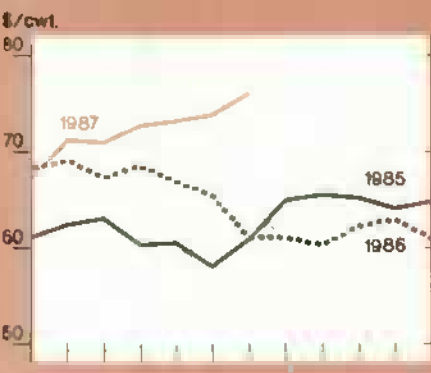
Broilers, 12-city average



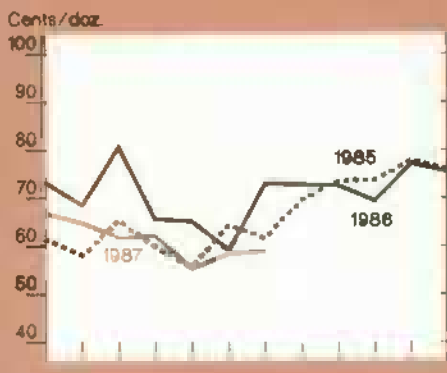
Corn, Chicago<sup>3</sup>



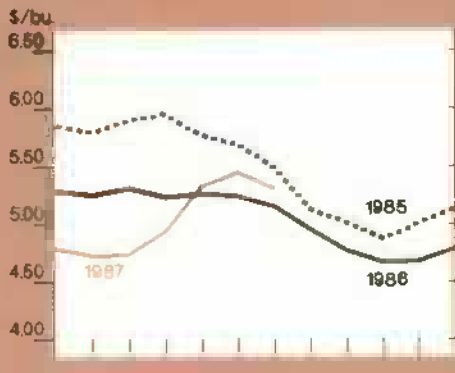
Feeder cattle, Kansas City<sup>1</sup>



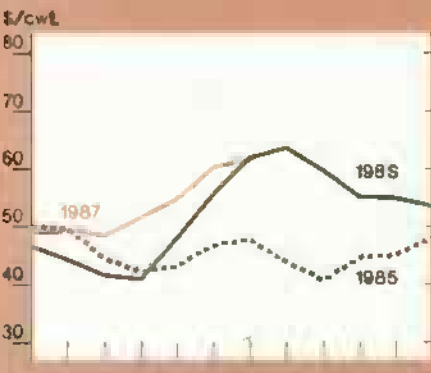
Eggs, New York<sup>2</sup>



Soybeans, Chicago<sup>4</sup>



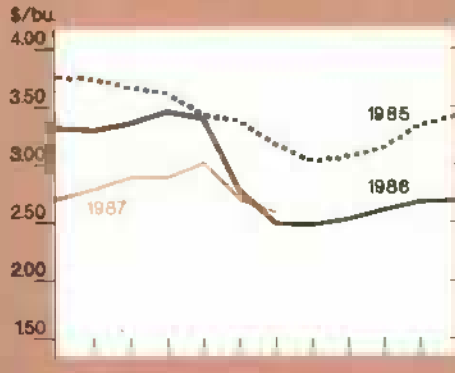
Barrows and gilts, 7 markets



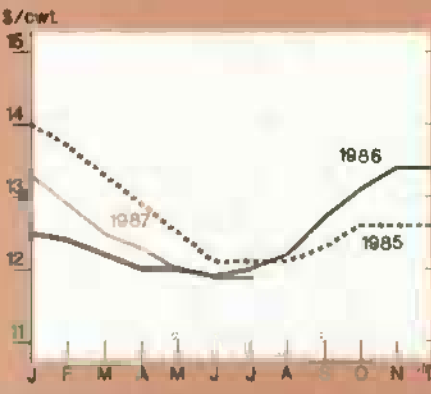
Rice (rough), SW Louisiana



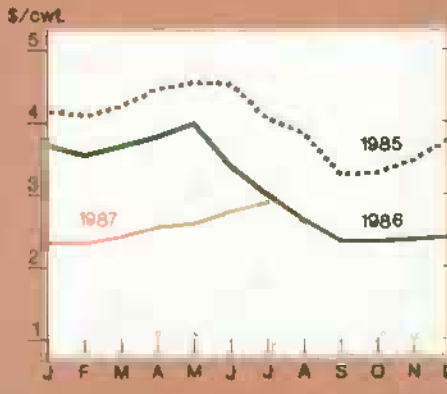
Wheat, Kansas City<sup>5</sup>



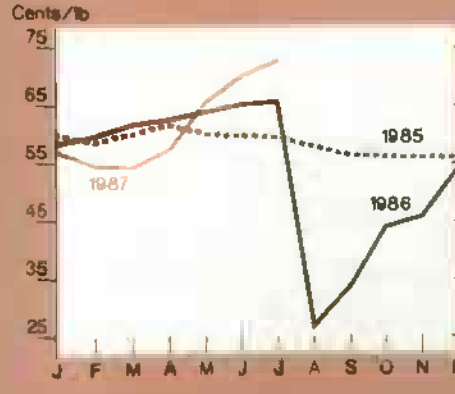
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>600-700 lbs., medium no. 2. <sup>2</sup>Grade A Large. <sup>3</sup>No. 1 Yellow. <sup>4</sup>No. 2 Yellow. <sup>5</sup>No. 1 HRW.



World trade in coarse grains during 1987/88 will expand modestly, likely totaling 87 million tons (October-September, excluding intra-EC trade). This continues the slow recovery from the 1985/86 low of 83 million tons.

World corn trade is expected to increase about 2 million tons in 1987/88 to 59 million. Sharply reduced Thai export availabilities mean the U.S. will get most of the export increase. U.S. corn exports, which are up by nearly 300 million bushels in 1986/87 (Sept.-August), are projected to rise by another 75 million in 1987/88 to total 1.6 billion (40.6 million tons).

### **U.S. Corn Yields Higher**

A crop planted in nearly record time and very timely rains through July combined to push the U.S. average corn yield to an expected new high of 121.4 bushels an acre, up from the 119.3 record of last season.

The higher corn yield will partially offset the 14-percent reduction in plantings and put the corn crop at 7.23 billion bushels, about 12 percent below 1986/87. The large increase in idled acreage, which usually is less productive than area planted, helped boost the corn yield.

### **U.S. Feed Grain Carryout Dropping**

The anticipated smaller U.S. crop and a slight increase in total use are projected to reduce the 1987/88 corn carryout by 5 percent, to 4.66 billion bushels, equivalent to 62 percent of expected annual use. With competitive prices, modest increases are called for in domestic feed use; food, seed, and industrial uses; and exports.

Smaller U.S. crops and/or increased use are estimated to lower carryout for grain sorghum, barley, and oats in 1987/88. The expected sorghum yield of 72.1 bushels an acre easily surpasses last season's record of 67.7 bushels, and partially offsets the 23-percent reduction in plantings. The sorghum crop likely will total 758 million bushels, 20 percent below a year ago, while the barley and oat crops are projected to be 518 million and 393 million bushels, respectively.

### **World Oilseed Supplies Increasing**

A record world oilseed crop of 203 million tons is expected in 1987/88.

This is an increase of 3 percent over the 196-million-ton crop likely for the current year. Soybean output is projected to rise 2 percent to a record 102 million tons, and crops of cottonseed, peanuts, rapeseed, and sunflowerseed may also increase. Foreign oilseed output in 1987/88 is rising 4 percent to a record 141 million tons, mainly because of larger area.

Larger soybean output from competitors and in the EC, the largest U.S. market, are likely to cut U.S. soybean exports 9 percent in 1987/88, to 670 million bushels (18.2 million tons). Exports were running unexpectedly fast late in the 1986/87 year, partly because Brazil closed soybean export registrations in June and Argentina crushed more of its crop than usual.

World soybean meal trade is up by about 9 percent during 1986/87, and U.S. exports gained 22 percent to 7.4 million short tons (6.6 million metric tons). With larger 1987/88 soybean supplies likely in Brazil and Argentina, the major U.S. competitors, and with import demand down in the EC because of larger internal supplies, U.S. meal exports are projected to drop in 1987/88.

#### **Generic Certificate Availability**

Issuance	\$ million
<b>Actual issuances</b>	
Deficiency & diversion payments 1/	7,303
Other 2/	1,316
Total	8,619
<b>Authorized issuances (July-September 1987)</b>	
1986 final diversion payments for barley and oats	55
1987 final diversion payments	794
1987 Conservation Reserve Corn Bonus Program	64
Export Enhance. & Targeted Export Assistance Programs	176
Disaster Payments	147
Total	1,236
Total, actual & authorized	9,855
<b>Certificate exchanges (April 1986-August 12, 1987)</b>	
	7,658
<b>CERTIFICATE AVAILABILITY</b>	<b>2,197</b>

1/ Issued through June 30.  
2/ Most issued through July 10.

Argentina and Brazil will continue to crush a large share of their soybean crops as they try to maintain big exports of soybean products. Contrary to earlier expectations, Argentina did not eliminate export tax differentials between soybeans and products. While taxes on beans were cut, those on oilseed product exports were eliminated.

Despite a 4.5-percent reduction in plantings this season, the U.S. soybean crop is estimated to be 2 billion bushels, the same as in 1986/87. Farmers are expected to harvest a record yield of 34.7 bushels an acre, up from 1985/86's record 34.1. The yield is high because the crop was planted early, rains were timely, and most of the reduction in plantings occurred in the South, where yields normally average 10 to 12 bushels an acre less than in the Midwest. August weather conditions will influence final yields, particularly in the Delta and Southeast.

The larger-than-expected crop and lower exports are projected to raise the carryout for soybeans in 1987/88 to 545 million bushels, compared with an estimated 505 million for 1986/87. With the Secretary's recent announcement that the 1987 loan rate will be \$4.77, market prices in 1987/88 are forecast at \$4.70 to \$5.00 a bushel. The Secretary announced that a marketing loan for the 1987 crop of soybeans will not be implemented.

The U.S. peanut crop is expected to be 4.15 billion pounds this year, rebounding 12 percent from last season's drought-reduced crop. Despite a 3-percent cut in plantings, output will be up because the expected yield of 2,765 pounds an acre is 15 percent higher than a year ago.

### **World Cotton Stocks Dropping Further**

World cotton production in 1987/88 is projected to rise 12 percent to 77 million bales, as area and yields both rebound. Higher world market prices at planting time, yield gains following poor 1986/87 weather for major producers, and policy shifts among foreign producers will contribute to the increase.

While consumption will show no gain from 1986/87, it will exceed production by 5 million bales, and both foreign and U.S. ending stocks will fall again. A cutback in nonmill use in China is a major factor holding down foreign consumption gains. But the sharp gains

in cotton prices are likely to slow the trend of the last few years toward all-cotton fabrics; blends may become more important again.

The slowdown in foreign consumption, coupled with larger foreign production, is expected to drop the volume of world trade from the 1986/87 record of 24.8 million bales. But the projected 24-million-bale trade level for this year is the second largest on record.

Foreign exporters' supplies have tightened, particularly as crop prospects for China and India have diminished. The stocks-to-use ratio for foreign exporters is expected to fall to the lowest since 1982/83. Consequently, U.S. exports are likely to increase again this year. Shipments are expected to total 7 million bales, compared with 6.7 million in 1986/87. U.S. sales for the year, which began August 1, already exceed 3.5 million bales.

This season's cotton crop is expected to total 12.91 million bales, up one-third from 1986/87's 9.73 million bales. The crop will be larger because of a 3.7-percent increase in plantings and an estimated 11-percent jump in the average yield, to 615 pounds an acre. Growers planted more cotton this season in response to the strong market, which has surged since last winter. The combination of higher exports and steady domestic mill use will mean total utilization in excess of production, and ending stocks will drop 27 percent.

#### **Generic Certificate Activity Slows**

Through early July, about \$8.62 billion worth of generic certificates had been issued, and another \$1.24 billion were expected to be issued through September 30. Through August 12, total issuances were \$9.86 billion and exchanges were valued at \$7.66 billion, leaving about \$2.2 billion of certificates available for exchange in coming months.

Generic certificate activity slowed appreciably during June-August from the previous quarter. Certificates were exchanged for 59 million bushels of wheat from June through August 12, comparable to exchanges for the same period last summer and well below the 241 million in March-May. As long as farm prices remain above the loan rate, growers will not place wheat under loan and therefore will not use certificates to make "quick-PIK" exchanges for new-crop wheat.

Certificate activity for corn has fallen this crop quarter, but it should increase with the approach of the harvest. About 432 million bushels of corn were acquired with certificates from June through August 12. Certificate premiums rose to 10 percent in mid-August, after averaging around 5 percent earlier this summer. Premiums are increasing as the available supply of certificates declines and as the corn harvest approaches.

Corn exchanges should rise as farmers either replace farmer-owned reserve stocks with crops to be harvested this fall ("PIK and roll") or free up storage capacity before harvest by reacquiring old- or current-crop year loan collateral. [Michael Hanthorn (202) 786-1840 and Frederic Surls (202) 786-1691]

**For further information, contact:** Sara Schwartz, world food grains; Allen Schienbein, domestic wheat; Janet Livezey, rice; Peter Riley, world feed grains; Larry Van Meir, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, peanuts. World information, (202) 786-1691; domestic, (202) 786-1840.

#### **Upcoming Releases from the Agricultural Statistics Board**

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the October *Agricultural Outlook* comes off press.

##### **September**

- 1 Egg Products
- 2 Poultry Slaughter
- 4 Celery
- Dairy Products
- 9 Vegetables
- 10 Crop Production
- 11 Turkey Hatchery
- 15 Milk Production
- Cattle on Feed
- 18 Hop Stocks
- Citrus Fruits
- 21 Catfish
- 23 Eggs, Chickens, & Turkeys
- 25 Potatoes
- Cold Storage
- Livestock Slaughter
- 29 Peanut Stocks & Processing
- 30 Grain Stocks
- Hogs & Pigs
- Agricultural Prices

## **HIGH-VALUE CROPS OVERVIEW**

### **Apple Production To Set Record in 1987**

Apple growers will harvest an estimated 9.7-billion-pound crop in 1987, 23 percent more than 1986 and 22 percent above 1985. Good weather in all production areas contributed to heavy fruit set and larger-than-normal fruit size, and all apple regions expect increases. In some apple areas, significant numbers of young trees are entering commercial bearing age. In Washington State, bearing acreage rose from 112,000 in 1985 to 126,000 in 1986.

Forecasts for this year exceed last year's apple production by 15 percent in the Eastern States, 60 percent in the Central States, and 19 percent in the Western States. Washington, the leading apple-producing State, will harvest 3.5 billion pounds, 13 percent more than in 1986.

Strong demand (both export and domestic) for fresh apples strengthened grower prices throughout the 1986/87 marketing season. Prices averaged 13.6 cents a pound for the crop, up 16 percent from the previous year. However, prices received by growers in July averaged 10 percent below a year earlier because of much lower shipments.

The lower valued dollar likely will boost apple exports again in 1987/88. Export shipments through May exceeded year-earlier levels by 10 percent. In addition, strong consumer demand for juice will raise processors' needs. Nevertheless, larger supplies likely will more than offset strong demand, pushing grower prices for fresh apples lower in 1987/88.

### **Pear Production Rising**

The 1987 U.S. pear harvest is expected to be 842,100 tons. Although not a record crop, it exceeds 1986 by 10 percent and 1985 by 13 percent. Early forecasts indicate a 520,000-ton Bartlett harvest in California, Oregon, and Washington, up 12 percent from 1986. Estimates for other pear types in the Pacific Coast States indicate production of 281,000 tons, which



would surpass last year by 8 percent. Pear production outside the Pacific Coast States will rise moderately this year.

Each year, pear growers and canners negotiate prices for Bartlett pears for canning based on crop size, stocks, and anticipated demand. Even with the expected larger crop, prices likely will equal or exceed last season because stocks are depleted and demand for canned pears and fruit cocktail is strong. Grower prices for winter pears, though, likely will fall below last season because of the larger crop and expected lower apple prices.

### **California Grape Yields and Production Down**

California's grape growers likely will harvest 4.53 million tons, 5 percent below 1986 and 13 percent less than in 1985. The raisin grape crop is forecast at 2.1 million tons, 3 percent above last year but 16 percent below 1985. The Raisin Industry Diversion Program removed approximately 15,000 acres from production this season, compared with 50,000 in 1986. The table grape forecast for 1987 totals 530,000 tons, falling 15 percent short of last year's production. The wine grape harvest likely will drop 11 percent from last year and total about 1.9 million tons.

Average grower prices for raisin and wine grapes probably will exceed those for 1986. Lower inventories and strong demand for both raisins and wine, along with smaller harvests forecast for 1987, will contribute to higher prices.

Grape production in States other than California is expected to increase 25 percent, primarily because of a 72-percent increase in New York and a 51-percent gain in Washington. This increase in other States partially offsets the decline in California, leaving total U.S. grape production this year down 2.4 percent from last.

### **Vegetable Acreage Up from Summer 1986**

Prospective area of seven fresh market vegetables for harvest during the summer season in the major States is up 3 percent from 1986 to 276,000 acres. Broccoli and cauliflower acreage are down, while carrot, celery, sweet corn, lettuce, and tomato acreage are up.

Combined contracted area of the five major processing vegetables (snap beans, sweet corn, pickle cucumbers, green peas, and tomatoes) rose 4 percent from 1986 to 1.31 million acres. This area accounted for 97 percent of the total planted for processed vegetables in 1986. Acreage increased for all crops except pickle cucumbers, whose area fell 3 percent from a year earlier.

Onion acreage harvested and to be harvested is up 5 percent from 1986. Summer storage onions, accounting for 61 percent of total acreage, are up 8 percent from last year to an estimated 60,530 acres. Major acreage increases occurred in Colorado, Idaho, eastern Oregon, and Michigan. California, whose onions are used mostly for processing, is expected to have 1 percent less acreage than in 1986.

Growing conditions in most areas have been normal to good. If growers receive normal or better yields, production of storage onions will be higher than last year, and prices this fall probably will drop from a year ago. However, strong export prospects should help soften the decline.

### **Sugar Production Likely To Be a Record**

Domestic sugar production for 1987/88 likely will exceed the record 1975/76 crop of 6.95 million tons, raw value. Estimated at 7.0 million tons, the current season's crop is forecast to exceed last year by 4.5 percent and 1985/86 by 16 percent.

Harvested sugarcane area, including seed, is forecast to rise 27,100 acres this year to 823,300. The crop looks good in most areas. With the higher acreage and normal yields, record cane sugar output of 3.4 million tons, raw value, is expected.

Sugarbeet area for harvest exceeds last year by an estimated 5 percent. With normal sucrose recovery, beet sugar production would approximate 3.6 million tons, raw value, up 5.4 percent from last year and 20 percent from 1985/86.

Higher sugar prices, improved yields, and improved processing are contributing to rising sugar production. Higher

sugar prices made sugarcane and sugarbeets more profitable than competing crops, so growers have signed contracts for as much production as possible. Improved varieties and better growing practices are raising average yields and sucrose content for both beets and cane. Processors have expanded capacity to handle the larger cane and beet crops and improved their sucrose recovery rates, to contribute further to sugar yields and production.

### **USDA Changes Tobacco Grading Standards**

USDA has modified the grading standards for flue-cured tobacco to describe more accurately tobacco as it appears in the marketplace. One amendment clarified the definition of "nested," a critical term defining uniformity of a tobacco lot. The old standard defines a nested lot as one that has been loaded, packed, or arranged to conceal tobacco of inferior grade, quality, or condition, which cannot be readily detected upon inspection.

The new nested definition refers to any lot of tobacco of different grades arranged so that the lower leaves are distinctly inferior in grade to the top. The change would make it more difficult to conceal inferior grades in a lot of tobacco.

Also deleted from the standards were two rarely used wrapper leaf grades.

### **CCC Loses \$373 Million on 1983 Tobacco**

The CCC will lose about \$373 million on loans made to farmers to support prices of burley tobacco grown in 1983. CCC called its price-support loans in May 1986 and acquired 212 million pounds (dry weight) of 1983-crop burley tobacco forfeited by growers in lieu of repayment. CCC sold the last of its acquired tobacco in July 1987.

Growers owed CCC about \$609 million in principal and interest at the time the loans were called. The producer-funded No-Net-Cost Tobacco Account paid the \$110 million interest obligation, and CCC will recover \$126 million from tobacco sales. The \$373-million loss represents direct Treasury costs. [Glenn Zepp (202) 786-1768]





## Commodity Spotlights

### Why Is Beef Consumption Falling?

The market for U.S. beef is 98 percent domestic. In the 1980's, this market has been weak. Beef production has been stable, but low compared with the mid-1970's, when cattle herd reductions were record large. Lower production results in higher beef and cattle prices. However, prices have not been as high as forecasters expected.

Cattle producers and others in the beef industry are concerned about weak beef demand. When economists discuss the demand for beef, they talk about the relationship between the quantity of beef purchased and its price. Throughout the 1980's, economists have forecast that, given production, cattle and beef prices would be higher than they actually have been.

The lower supplies caused economists to predict prices would be higher than they were. This confirms that factors other than price affect beef consumption, especially beef production. Among other factors are (1) the relatively low price and large supplies of chicken, (2) a shift in consumers' tastes away from beef, and (3) changes in income distribution.

Larger quantities of meats such as pork and chicken at relatively lower prices have an important effect on the quantity of beef purchased by an individual. Whereas per capita pork

production and consumption have fluctuated near 60 pounds per capita for the past 30 years, chicken production and consumption have increased dramatically. Improvements in feed efficiency and marketing have made chicken an inexpensive alternative to beef.

Consumer tastes are difficult to measure. Consumers are concerned about their weight and about the effects of cholesterol on their health. Such concerns may shift expenditures to other food products, or even to consumers' purchases other than food. These substitutions can be explained by complex economic frameworks that examine all the alternatives. Or, as is done below, they can be summarized as an aggregated trend.

As incomes increase, beef consumption tends to increase. However, low-income consumers' consumption of beef is much more sensitive to income changes than high-income consumption. For example, a \$25-a-week raise may not change the beef consumption of a person earning \$1,000 a week, but it could greatly increase the beef consumption of someone earning \$100 a week.

### Which Factors Cause Shifts in Beef Consumption?

The effects of meat prices, income distribution, and changes in consumers' tastes on the demand for beef were investigated using data from 1960 through 1984. USDA publishes estimates of per capita consumption and average retail prices of beef, pork, and chicken.

The effects of income distribution on beef consumption were based on Department of Commerce estimates of per capita disposable income, average and median family income, and the unemployment rate. Half of U.S. families earn more and half earn less than the median family income. If there are more low-income than high-income people, median income will be less than the average income.

A fall in the ratio of average to median income indicates relatively fewer low-income people. Consumption of beef, pork, and chicken showed consistent relationships among the effects of the mean/median income ratio, the unemployment rate, and per

capita disposable income. But beef consumption is more sensitive to income distribution than pork or chicken.

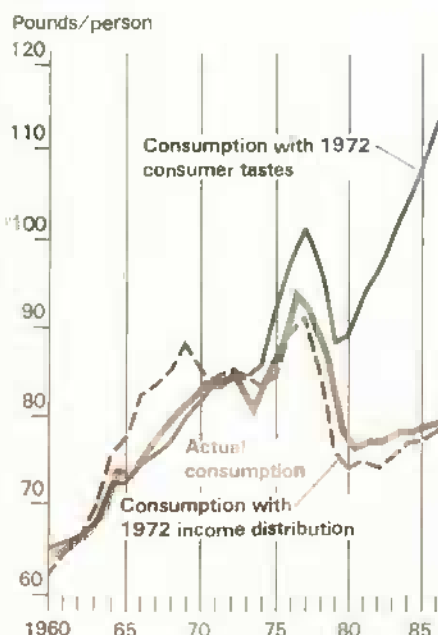
Measuring the impact of changes in tastes is much more difficult. No data exist to measure tastes either directly or indirectly. However, after measuring the influences of income, income distribution, and beef, pork, and chicken prices, there remains a downward trend in beef consumption over time.

Rather than fully account for this remainder in terms of detailed alternatives for consumer expenditures, the remainder was simply associated with the passage of time and dubbed "a change in tastes."

Of all the factors investigated, the most important for describing decreasing beef consumption was this residual trend, changing tastes. This trend would have accounted for a consumption decline of more than 30 percent between 1972 and 1984 if prices, income distribution, and other factors were held constant. Lower prices for pork and broilers further decreased beef demand.

However, average income growth, a more favorable income distribution, and the lower inflation-corrected price of beef buoyed consumption so that the actual decline, after all decline factors were accounted for, was less than 10 percent during 1972-84.

### Taste Changes Hurt Beef Consumption, But Income Distribution Switches Helped It



### What Do These Shifts Portend?

Demand for beef and the price of beef and cattle are likely to be under pressure for the next several years. Chicken and pork production is expanding, and their prices are likely to be lower, thus decreasing consumers' willingness to purchase beef.

Income growth and a reversal in the downward trend in tastes are the keys to expanding domestic demand. However, most projections show that income growth will be sluggish for the next several years. And, since consumer tastes are difficult to predict, it is impossible to forecast whether or when the trend in beef demand will be reversed.

The cattle cycle now appears to be at its low end. With feed prices low, the incentive exists to stabilize cattle herds and beef production.

Retail beef and cattle prices are at their highest nominal levels since the early 1980's. Higher prices might encourage expansion of the cattle supply. The projected growth in supplies of poultry and pork along with sluggish income growth suggests that consumer demand for beef will continue to be weak in the near future.

If the trend in tastes continues, cattle and beef prices could fall even if per capita production stabilizes. [Bill Hahn (202) 768-1821]

### Feed Wheat Use Surges in 1986/87

Abundant wheat supplies and attractive prices led to an estimated 17-percent increase in global wheat feeding during 1986/87. This reflected both larger trade flows and increased use of domestically produced wheat for feed. World use of coarse grains for feed is up only 2 percent in 1986/87, and coarse grains' share of total world use of cereals for feed has shrunk to 83 percent, compared with 85 the previous year.

World use of wheat for feeding grew at an average annual rate of 5 percent over the last two decades. The current

surge has been highly visible because of the increase in world feed wheat trade. In many cases, feed wheat prices were (and still are) comparable to or below prices of coarse grains traditionally purchased by some importers. This is due to generally low world wheat prices and to discounting of lower quality wheats.

### Wheat May Substitute For Coarse Grains

Although wheat is commonly labeled a food grain, an average 19 percent of the world's total wheat utilization from 1981/82 to 1986/87 was for feed, not direct human consumption. However, estimates of wheat for feeding are rough. Some lower quality wheats ostensibly sold for feed may be milled when blended with higher grades. Trade flows are similarly difficult to quantify, as neither importers nor exporters commonly designate wheat for feed. Despite widespread use of the term "feed wheat," there is no standard definition.

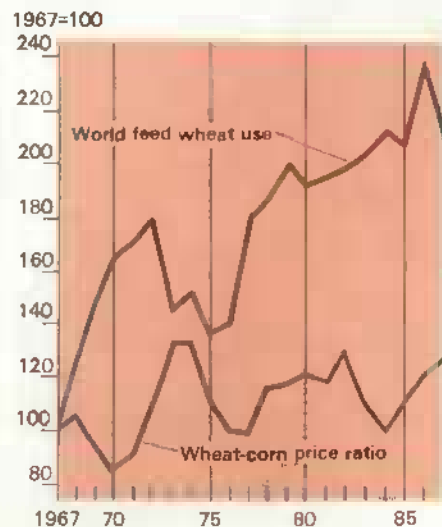
Wheat can replace coarse grains for feeding with minor adjustments in feed rations. All wheat varieties contain as much energy as corn, and generally average 2 to 5 percent more protein. However, the benefit of the higher protein is lessened in hog rations because the most important amino acid, lysine, is present in smaller quantities than it is in corn. Wheat is palatable, and even wheat damaged by drought, frost, insects, disease, or fire can be suitable for feed.

Animal feeders are increasingly sensitive to pricing of feed ingredients and are becoming more flexible in formulating their rations. Wheat generally becomes more attractive for feed when protein meal prices are high and the wheat-to-corn price ratio is low. Decisions on shifting among different grains, or between grain and nongrain feeds, may be influenced by seasonal factors such as the availability of locally harvested grains.

### Europe, USSR Are Largest Feed Wheat Users

The USSR is the single largest feeder of wheat in the world, accounting for more than 40 percent of global wheat feed use. The EC, which accounts for 25 percent, is next, followed by Eastern Europe, the United States, and Canada. Despite its top position over the last 6 years, the USSR has gradually decreased the use of feed wheat and has increased the use of coarse grain.

### Feed Wheat Use Trending Up for Last Decade



Use based on local marketing years; 1986 & '87 forecast. Prices for Australian standard white wheat, f.o.b., and U.S. No. 3 yellow corn, f.o.b. Gulf; calendar year averages, 1987 forecast.

At the same time, the EC has shifted to greater feed wheat use at the expense of coarse grains. High internal prices have encouraged domestic wheat production and use. EC wheat production expanded 17 percent between 1980/81 and 1986/87, primarily because of gains in the UK.

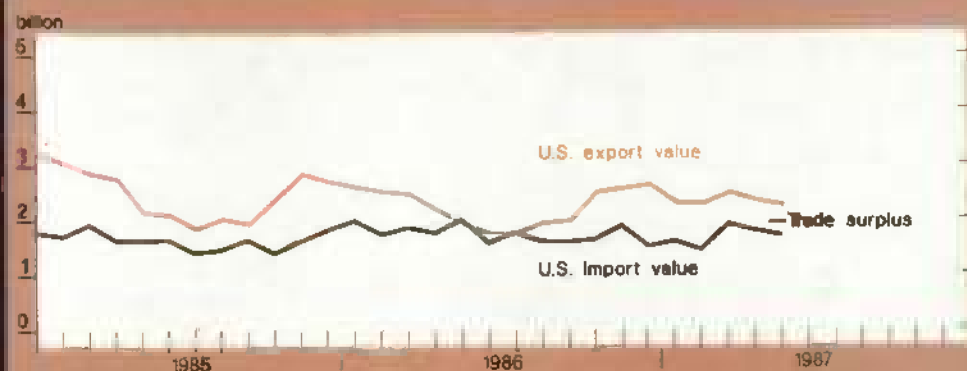
EC wheat is characterized by high yields and lower milling quality because of moist conditions across northern Europe. This is particularly true in the UK, where technological changes have enabled wheat production to expand 65 percent since 1980. As a result, the EC has increased its supply of feed-quality wheat. There has been an increase in EC onfarm feeding instead of mixed feed purchases, and farmers have become more likely to use wheat. In addition, large wheat supplies have encouraged exports. The EC has sold wheat for feed at discount prices to the Soviet Union, Mexico, and South Korea.

### Australia, Canada Raise Exports As Feed Wheat Trade Expands

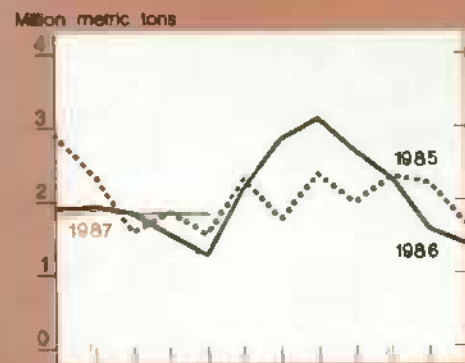
Since the tight world grain markets of the mid-1970's, there have been few large changes in world feed wheat use. Globally most feed wheat is domestically grown and not traded, with

# U.S. Agricultural Trade Indicators

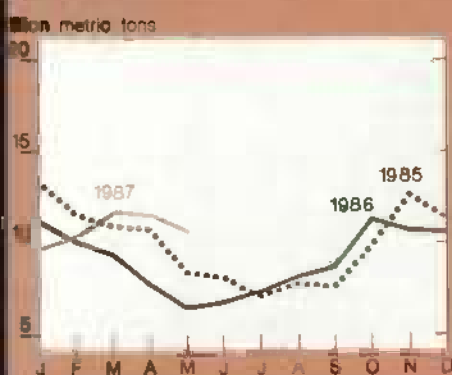
## U.S. agricultural trade balance



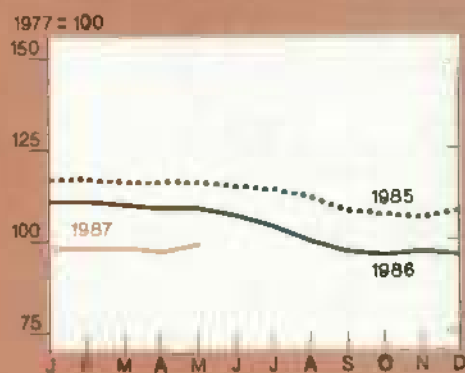
## U.S. wheat exports



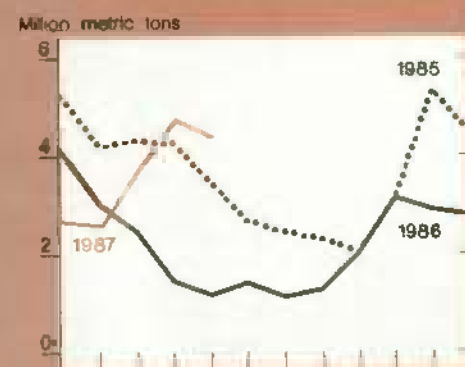
## Export volume



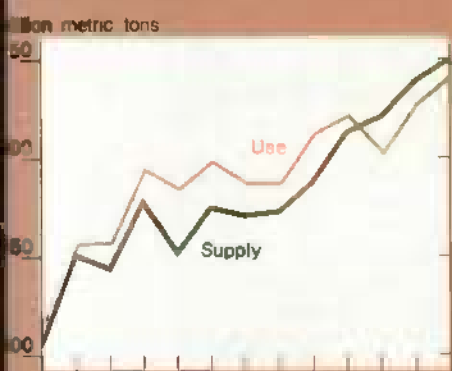
## Index of export prices



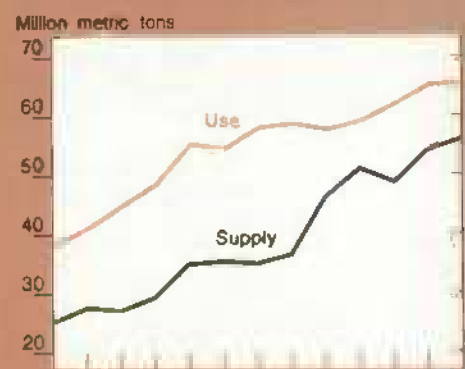
## U.S. corn exports



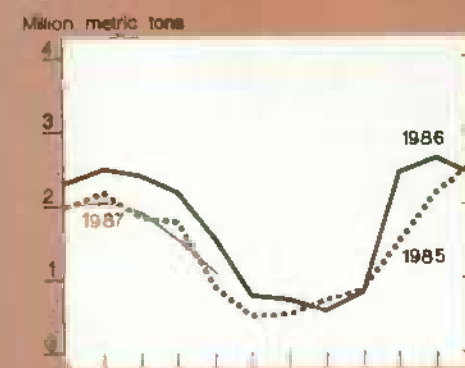
## Foreign supply & use of coarse grains



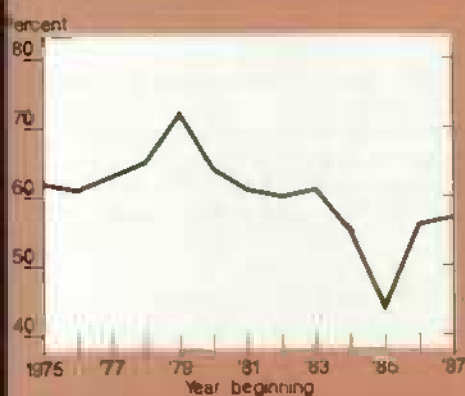
## Foreign supply & use of soybeans



## U.S. soybean exports



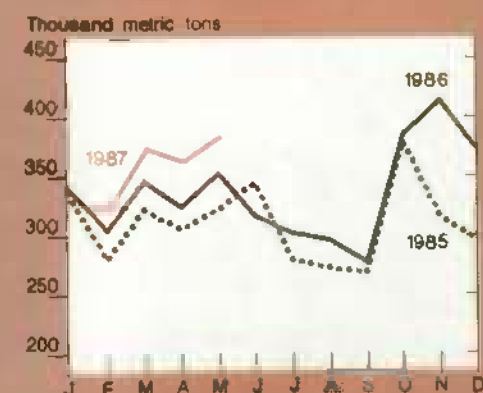
## U.S. share of world coarse grains exports<sup>1,2</sup>



## U.S. share of world soybean exports



## U.S. fruit & vegetable exports<sup>3</sup>



<sup>1</sup> Excluding intra-EC trade. <sup>2</sup> October-September years. <sup>3</sup> Includes fruit juices.



# Feed Wheat Utilization by Major Consumers

	1980/81-84/85 annual average		1985/86-87/88- annual average	
	Share of world use	Share of domestic feed grain use	Share of world use	Share of domestic feed grain use
	Percent			
USSR	47.2	36.6	40.3	31.9
EC	19.9	20.1	25.0	28.0
Eastern Europe	15.4	19.4	15.7	21.2
United States	7.2	4.5	8.1	5.2
Canada	2.5	12.1	2.4	12.2
South Korea	0.2	5.6	1.4	28.3
Mexico	0.7	8.1	1.0	14.7

-1987/88 forecast.

very little used in developing countries. What was unusual in 1986/87 was the jump in total wheat for feeding, including growth in feed wheat trade and increased use by non-traditional users.

The EC, Australia, and Canada are the main exporters of feed wheat. Wet harvest weather over the past few years increased Australia's supply of "general purpose" and feed-quality wheat. General-purpose wheat is low quality. It may be suitable for milling; if its price is low enough, it can be an attractive feed grain. Since supplies of low-quality wheat exceeded domestic demand, Australia exported low-priced feed wheat to South Korea, Mexico, and the Philippines.

Canada experienced late rains in 1986, resulting in below-normal-quality wheat. "Utility" and feed wheat accounted for 17 percent of the total Canadian wheat crop in 1986, nearly double the 5-year average. This led to increased domestic wheat feed use and to exports at discount prices.

Recent and dramatic increases in wheat feeding by Mexico and Korea captured much attention; these stemmed entirely from imported supplies. Estimated use was up 49 percent to 1.7 million tons in Korea during 1986/87. Use was up 28 percent to 1.4 million tons in Mexico, on top of a 37-percent rise the previous year.

For Korea, extremely attractive prices led to the wheat imports. During much of 1986, the delivered price of

feed wheat was actually lower than that of corn. At the end of 1986, Korea paid as little as \$71 per ton (delivered, cost and freight) for Australian feed wheat, compared with about \$84 for U.S. corn. At that time, average f.o.b. prices for Australian milling wheat were \$110. The 1986/87 spurt in wheat fed to livestock displaced some coarse grains, with coarse grain feed use in South Korea down 16 percent.

In 1986/87, Soviet wheat feeding was estimated 22 percent above a year earlier. The increase was due in part to large domestic supplies resulting from an excellent wheat harvest. In addition, the Soviet Union took advantage of low prices and imported large quantities of feed wheat, primarily from Canada and the U.K. USSR wheat imports in 1986/87 totaled 16.5 million tons; of this, nearly 4 million tons were feed quality.

## 1987/88 Outlook for Reduced World Use

Assuming normal weather, forecasts for 1987/88 call for a decline from the peak in world wheat feeding and a return to trend growth. The decline can be attributed primarily to a drop in Soviet feed wheat use due to reduced wheat supplies. The lower Soviet wheat supplies are being offset by near-record coarse grain production.

However, feed wheat exports could continue at current levels. World feed wheat is expected to remain ample,

with a continuation of large supplies in the EC. Weather conditions at harvest have a major influence on feed wheat supplies in Australia and Canada; both countries have expanded their feed wheat exports during the last few years and may be able to maintain market shares by continuing to export wheat classified as feed in 1987/88, even if harvest weather is optimal.

[Pete Riley and Sara Schwartz (202) 786-1691]

## Marketing Orders: Industry Self-Regulation

Federal marketing orders are industry self-regulation programs. They enable producers of certain fruits, vegetables, tree nuts, and specialty crops to raise grower prices and their incomes indirectly by controlling product quality, quantity, and other market conditions.<sup>1</sup>

Research indicates that marketing orders can have both beneficial and adverse effects on growers and consumers. This sometimes makes orders controversial and newsworthy. Recently, producers turned down a proposed order for eggs and terminated orders for hops, tart cherries, and Florida Indian River grapefruit. Also, some citrus producers claim Western citrus orders create inequities among growers and do not enhance grower incomes.

## Orders Emerged from 1930's Cooperative Movement

Marketing orders grew out of the 1930's cooperative movement, which aimed to combat low prices and chaotic marketing conditions. Numerous fruit and vegetable marketing cooperatives tried to promote orderly marketing by cutting sales and setting quality standards. Most attempts failed because nonparticipating producers and handlers benefited from the resulting higher prices without restricting their own marketings.

This inequity, known as the "free rider" problem, led to Federal marketing order and agreement programs enacted as the Agricultural Marketing Agreement Act of 1937. The act has since been amended several times.

<sup>1</sup> Federal marketing orders are used extensively for fluid milk, but they are administered differently than fruit and vegetable orders. This article does not apply to milk orders.

# FEDERAL MARKETING ORDERS

## FRUIT

	Minimum grade requirement	Minimum size requirement	Market allocation	Reserve pool provision	Producer allotment	Shipping holidays	Prorates	Production & marketing research	Market development	Container & package standardization
Florida citrus 1/	X	X			X					X
Texas oranges & grapefruit 2/	X	X					X	X	X	X
Calif.-Ariz. naval oranges		X				X	X	X		
Calif.-Ariz. Valencia oranges		X				X	X	X		
Calif.-Ariz. lemons		X				X	X	X		
Florida lemons	X	X			X	X	X	X	X	X
Florida interior grapefruit					X					
Florida avocados	X	X			X		X	X	X	X
California nectarines	X	X					X	X	X	X
California pears, plums, peaches	X	X					X	X	X	X
Georgia peaches	X	X								
Colorado peaches	X	X					X	X		
California kiwi fruit	X	X								X
Washington peaches	X	X					X	X	X	X
Washington apricots	X	X					X	X	X	X
Washington sweet cherries	X	X					X	X	X	X
Wash.-Oreg. fresh prunes	X	X					X	X	X	X
California desert grapes 4/	X	X			X		X	X	X	X
California Tokay grapes	X	X			X	X	X	X	X	X
Pacific Coast winter pears	X	X					X	X	X	
Hawaii Papayas	X	X					X	X	X	X
Cranberries (10 States) 3/			X							
Wash.-Oreg. Bartlett pears	X	X					X	X	X	X
California olives	X	X					X	X	X	X

## VEGETABLES

Idaho-E. Oregon potatoes	X									X
Washington potatoes	X	X								
S. Oreg.-N. Calif. potatoes	X	X					X	X		
Colorado potatoes	X	X					X	X		X
Maine potatoes	X	X								X
Virginia-N. Carolina potatoes	X	X								
Idaho-E. Oreg. onions	X	X			X		X	X	X	X
South Texas onions	X	X			X					X
Rio Grande Valley (Tex.) tomatoes 4/	X	X					X	X	X	X
Florida tomatoes	X	X					X	X	X	X
Florida celery	X	X			X	X	X	X	X	X
South Texas lettuce	X	X			X	X	X	X	X	X
Texas melons	X	X					X	X	X	X

## DRIED FRUITS, NUTS, & SPECIALTY CROPS

California almonds	X		X	X			X	X		
Oreg.-Wash. filberts	X	X	X							
Pacific Coast walnuts	X	X	X	X			X	X		
Far West spearmint oil 4/				X	X					
California dates	X	X	X				X	X	X	X
California raisins	X	X	X				X	X	X	X
California prunes	X	X		X			X	X	X	X

1/ Container & package standardization applies. 2/ Restricting handler deliveries is specifically prohibited. 3/ Grade & size specifications apply only to restricted portion of crop. 4/ Order Only: no marketing every year.

Orders are initiated by growers. The Secretary of Agriculture establishes a Federal marketing order on the basis of evidence presented at a public hearing and approval by two-thirds of the producers involved (three-fourths for California citrus fruit). Orders are managed by committees of growers, or growers and handlers, and are binding on all handlers in the areas designated.

The Secretary may suspend or terminate an order if it obstructs or does not support the declared policy of the enabling legislation. An order must be ended if at least half of the producers,

or producers representing at least half of the production, vote to end it. Growers periodically vote to continue their orders.

Currently there are 44 Federal marketing orders for horticultural crops. In addition, numerous State marketing orders and agreements provide support for research and promotion.

## Supply Management Provisions Regulate Quantities Sold

Supply management provisions help regulate the amount marketed. There are four kinds of supply management: 1) producer allotments, 2) market allocations, 3) reserve pool, and 4) market flow.

**Producer allotments.**—These help prevent price-depressing market gluts by assigning maximum quantities which handlers on behalf of growers may sell in specific markets. Normally these maximums are assigned to a grower based on historical sales. Only three orders—cranberries, Florida celery, and spearmint oil—provide for producer allotments. Allotments in the cranberry order have never been used. Allotments are set for the other two commodities, to enhance grower returns, but may have limited effect. For example, any attempt on the part of Florida celery growers to raise prices by reducing sales likely would be thwarted by increased celery marketings from California. Restrictive supply controls by spearmint oil producers could be countered by imports and domestic production not covered by the order.

If an allotment restricts marketings, and can be bought and sold, it can acquire value and thereby become a significant cost to growers. Records of hearings suggest that this was one factor leading the Secretary of Agriculture to terminate the hops order in 1985.

**Market allocation.**—These provisions specify the maximum quantity handlers may ship to one of two or more separate markets. Such provisions raise producer returns by diverting shipments from a primary market (usually the fresh or domestic) to a secondary market (usually processing or export).

**Reserve pools.**—The orders provide for setting aside part of a crop when supplies are considered large, to be sold when market conditions improve. Reserve pool contents may be held for sale in succeeding marketing years, diverted to a secondary market, or disposed of in nonfood uses.

**Market flow provisions.**—These consist of handler prorates and shipping holidays, and they help even out shipments over the season to avoid gluts and shortages. Prorates specify the maximum quantity a handler may ship to the primary market over a stated period, usually a week. Use of prorates during all or nearly all of a marketing season may be similar to market allocation—limiting sales to the primary market and causing some product to be diverted to a secondary market.

The California-Arizona fresh citrus industry uses prorates extensively, and their use is controversial. Proponents claim prorates match supply and demand at prices which are fair for both producers and consumers. Opponents argue that prorates unduly restrict individual decisionmaking and cause overinvestment in the citrus industry.

Shipping holidays represent a weaker form of market flow provision. They temporarily prohibit commercial sales by handlers. Growers typically use shipping holidays to avoid supply buildups in terminal markets during periods of limited trade activity, such as the week between Christmas and New Year's.

#### **Quality Controls Improve Product Image**

Quality controls establish minimum grade, size, and maturity requirements for a product. They usually are enforced through mandatory Federal inspection. Quality standards enable an industry to establish a positive product image by assuring wholesale buyers and consumers that the produce is not immature, overripe, or otherwise undesirable.

The higher average quality can build consumer loyalty and may expand sales. In addition, removing inferior products from the market cuts down spoilage and consumer rejection. Less loss reduces marketing costs and may raise grower returns and lower consumer prices.

Quality standards are sometimes controversial. For example, the kiwi fruit order has a shape-of-fruit standard. Opponents claim it excludes good fruit from the market. Proponents argue that misshapen fruit contributes to a poor consumer image of U.S. kiwi fruit and limits market expansion.

#### **Orders Aid Research, Promotion**

Production and marketing research and commodity promotion are a relatively small part of total costs if they are spread over all handlers. Since marketing orders require compliance by all handlers within the boundaries of the order, they enable industries made up of small producers to conduct joint research and promotion.

Pack and container standardization, a second type of market support activity, assures receivers of shipment consistency and can reduce marketing costs.

Market support activities are sometimes marked by controversy. For example, the filbert, almond, and olive orders permit handlers who advertise their own brands to obtain credit for some advertising expenses against order assessments. Opponents claim that brand advertisers benefit from the industry advertising program without paying. Brand advertisers argue that their advertising benefits the industry as well as themselves.

#### **Orders Hold Little Promise For Major Field Crops**

Could marketing orders be used as a substitute for Federal price and income support programs for the major field crops? The idea may have considerable appeal because marketing orders involve no direct Treasury outlays. Further, most producers who work under marketing orders appear satisfied with them.

Only the supply management regulations of marketing orders appear to measurably enhance grower prices, and then only indirectly, when an industry can isolate its market from other suppliers. Generally it is easier to isolate markets for horticultural crops than for the major field crops.

Most marketing order crops are grown by relatively small numbers of producers within relatively small geographic areas, whereas field crop production occurs over wide areas of the country and involves many producers. A marketing order for major field crops would be much more difficult to organize and implement.

Further, field crop producers in other countries compete directly with U.S. producers through world trade. High tariff or nontariff barriers would be needed to restrict imports. If prices rose within the United States, grain users could circumvent the marketing restrictions by producing their own grain and selling it in a different form. Feedlot operators, for example, could grow their own corn and market it as fed cattle. [Glenn Zepp (202) 786-1768 and Nicholas Powers (202) 786-1869]



## **Resources**

### **FARM CHEMICALS AND GROUNDWATER QUALITY**

The United States relies heavily on groundwater for domestic drinking, livestock, and irrigation. More than 97 percent of rural drinking water in the United States comes from underground sources, along with 55 percent of livestock water and 40 percent of irrigation water. In 1980, groundwater served 40 percent of the population using public water supplies.

Groundwater contamination, as the term is currently being used, occurs when agricultural chemicals applied to the soil surface leach to subsurface water.

Little is known about the extent of groundwater contamination from human activities, even though there are documented and suspected risks to human and animal health from exposure to contaminated groundwater. Concentrations of agricultural chemicals currently found in groundwater may not always exceed established health advisories.

Contamination can persist for many years and cleanup costs can be prohibitive. Interaction between surface water and groundwater can mean that in some areas aquifer contamination eventually pollutes streams, lakes, and estuaries.



Agricultural chemicals may contribute to groundwater contamination. Programs and policies to control groundwater contamination from chemicals are being implemented by several States, including California, Iowa, and Wisconsin, and are under discussion in other States and federally. But the lack of consistent, comprehensive data relating agricultural activities and groundwater contamination has hampered policy development.

Several trends over the past decades have increased the potential for agricultural contamination of groundwater. Use of inorganic nitrogen fertilizers, a major source of nitrate-nitrogen contamination, increased 150 percent between 1965 and 1984. Pesticide use nearly tripled between 1964 and 1984, mostly from increased use of herbicides, although acreage reductions resulting from the 1985 Food Security Act have led to reduction in total use of both pesticides and fertilizers.

Other trends—including concentrated livestock, dairy, and poultry operations; conservation tillage expansion; and increases in irrigated areas—may have raised the potential for contamination in some areas, although in the case of conservation tillage the relationship to groundwater contamination is not fully defined.

The extent of groundwater contamination depends on physical factors as well as land use and agricultural prac-

tices. Climate, hydrogeology, soil characteristics, aquifer recharge rates, water table depth, and characteristics of the aquifer and unsaturated zone are all important. The characteristics of a potential pollutant itself, such as how easily it dissolves and how long it persists, also influence contamination.

#### **Potential Contamination Areas Identified**

ERS recently identified areas of potential groundwater contamination from agricultural uses of both pesticides and nitrogen fertilizers in the United States. Potential contamination was defined by combining county data on physical vulnerability with data on chemical use. The numbers and distribution of people using groundwater in areas of potential contamination were estimated. The data do not analyze local problems, but depict regional patterns.

About 46 percent of counties in the continental United States have the potential for contamination by pesticide and fertilizer residuals. There are 800 counties with potential pesticide contamination only. These counties are located mainly along the Eastern Seaboard, Gulf Coast, and upper Midwest.

Counties with potential nitrate contamination total about 300. These are found principally in the Great Plains and portions of the Northwest and Southwest. Only about 300 counties

have potential for both pesticide and nitrate contamination. These are located chiefly in the Corn Belt, Lake States, and Northeast.

More than 50 million people rely on groundwater for their drinking water in the regions with potential for contamination. Of these people, about 19 million obtain their water from private wells, which are more vulnerable to contamination because they are shallower than public wells and often not built as well. Areas with the most people relying on private wells are scattered through the South, Northeast, Midwest, and portions of the West.

More than 65 percent of the 50 million live in areas where only pesticide contamination is indicated. A majority of people using public groundwater supplies (68 percent) reside in areas with potential pesticide contamination.

#### **Monitoring Private Wells Could Cost Over \$2 Billion**

Contaminated groundwater could be costly to society and individuals, particularly from the standpoint of human health. The lack of available data on contamination occurrences and costs makes direct assessment difficult.

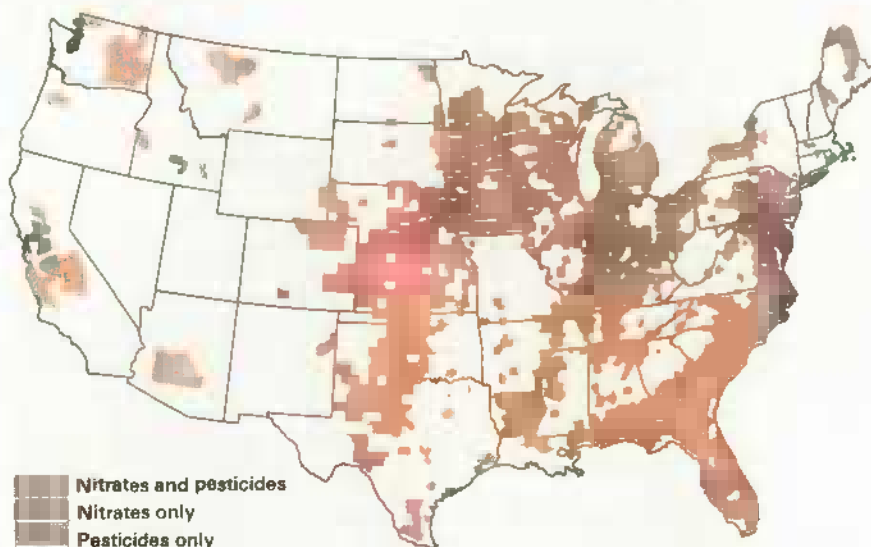
One way to estimate what society must pay to reduce contamination risk is to determine what it would cost to avoid the risk. The first step in avoidance strategy is to monitor groundwater quality. If the information indicates that groundwater contamination is a problem, remedial action can then be taken.

The ERS estimates of initial monitoring costs for private wells in counties with potential for contaminated groundwater range from almost \$1 billion to more than \$2 billion, depending upon the assumptions used. The average or best estimate is about \$1.4 billion for a one-time check. Pesticides, alone or in combination with nitrates, represent almost all of the monitoring costs because of the potentially larger geographical area and higher laboratory costs involved in pesticide checks. Rural residents who rely on private wells, particularly farmers, would incur a large portion of monitoring and detection costs.

#### **Education, Research Important**

Farmers are more affected by agricultural chemicals in groundwater than

Areas of Potential Groundwater Contamination from Farm Chemicals



in surface water because their wells are likely to be close to the sources of contamination. Surveys suggest that farmers are concerned about groundwater contamination. Education programs for farmers therefore could play a major role in preventing or minimizing groundwater contamination. The success of education programs depends, in part, on research. Many research programs are just getting started.

Different strategies may be appropriate for dealing with nitrates than those for pesticides. Monitoring for nitrates is relatively inexpensive, and the small number of private wells potentially affected may make a remedial program feasible. In contrast, monitoring costs for pesticides are so high that detection and remedial action may not be a workable strategy. Effective and economical prevention measures may be more efficient.

A protection strategy would be most effective if it targeted the most vulnerable regions. Not all regions where agricultural chemicals are being used are equally dependent upon groundwater, densely populated, or vulnerable to contamination, so regions could be assigned priority for groundwater protection. [Linda K. Lee (202) 786-1444]

## LENDERS HOLD 8 MILLION FARM ACRES

The financial problems of the farm sector during the 1980's have increasingly passed to lenders, who have acquired growing amounts of farmland via foreclosure, deed in lieu of foreclosure, and bankruptcy. Many observers are concerned that the sizable inventory of farm property held by lenders has placed a lid on farmland prices in a relatively inactive market.

The major institutional lenders—the Farm Credit System (FCS), commercial banks, the Farmers Home Administration (FmHA), and life insurance companies—together accounted for 74 percent of the \$92 billion farm real estate debt (excluding households) on December 31, 1986. A major portion of the rest of the debt is owed to those who have sold their farms on contract or taken a mortgage as part of the sales agreement. Little is known about the amount of acquired or reverted property held by this "individuals and other lenders" group. The focus here is on the four major categories of institutional lenders.

Acquired Farm Properties Held by Institutional Lenders 1/

Lenders	Properties	Acres	Value
	---Number---		\$1,000
FCS	8,082	2,770,000	1,108,342
Commercial banks	NA	1,212,500	413,800
FmHA	5,276	1,577,683	848,715
Life Ins. companies	2,731	2,424,000	1,442,000
Total	NA	7,984,183	3,812,957

NA= Not available. 1/ Data for the FCS and FmHA are for March 31, 1987; for the commercial banks and life insurance companies, December 31, 1986.

## Total Farmland Holdings Worth \$3.81 Billion

Total holdings of farmland acquired by the four institutional lender groups are estimated at 7,984,000 acres, valued at \$3.81 billion. Total acres held are approximately equal to the combined area of Maryland and Delaware.

The FCS holds about 35 percent of the acquired acres, the largest share; life insurance companies hold roughly 30 percent. In terms of value, however, life insurance companies hold 38 percent of the total and the FCS 29 percent.

Commercial banks have the smallest share in terms of acres or value. Unlike other lender groups, banks do not report farmland holdings, but they do report total land holdings. So the farmland share of total holdings was estimated by multiplying total holdings by the ratio of farm real-estate loans to total real-estate loans for each bank.

On January 1, 1937, during the Great Depression, the leading lending agencies held about 28 million acres of farmland, compared with 8 million now. However, conditions in the 1930's were radically different from those of the 1980's. Today's acquisitions, beginning in 1982, occurred rapidly. In contrast, the 1930's saw acquisitions spread over nearly two decades, building upon the economic stress that began for the farm sector in the early 1920's.

## Acquired Farmland Is Factor In the Market

Are lender holdings large enough to depress land prices? To answer this

question, acquired farmland is compared with the total stock of farmland, first in terms of total acres, and then in terms of total value of land and buildings. Finally, the inventory of acquired property is compared with estimated annual turnover of farmland in the market.

The 7.98 million acres of acquired farmland represent 0.8 percent of the 1-billion-acre total of U.S. farmland. The \$3.81 billion value of all acquired properties is 0.7 percent of the total value of all U.S. farmland and buildings.

The stock of lender-acquired farmland is large relative to the annual flow of farmland sales. An ERS survey of rates of rural land transfer for July 1985-June 1986 estimates that 3.3 percent of the acres and 3.5 percent of the value of all rural land were transferred during this period. Although transfer rates for farmland likely are somewhat lower than for this broader definition of rural land, the survey does suggest that the 1980's farmland market was far from dead. Land transfers determined from the survey are well within the historical rule of thumb of 2 to 5 percent of farmland being transferred in 1 year.

A transfer rate of 3.3 percent implies that an estimated 33,243,000 farm acres were transferred per year. The four institutional lender groups held 7,984,000 acres in inventory during December 31, 1986-March 31, 1987, equal to 24 percent of sales.

The total value of U.S. farmland and buildings was \$553.7 billion on February 1, 1987. A transfer rate of 3.5 percent yields an estimated \$19.4 billion in farmland transferred annually. Together, all four institutional lender



groups held \$3.81 billion in acquired properties, or 19.7 percent of estimated annual sales.

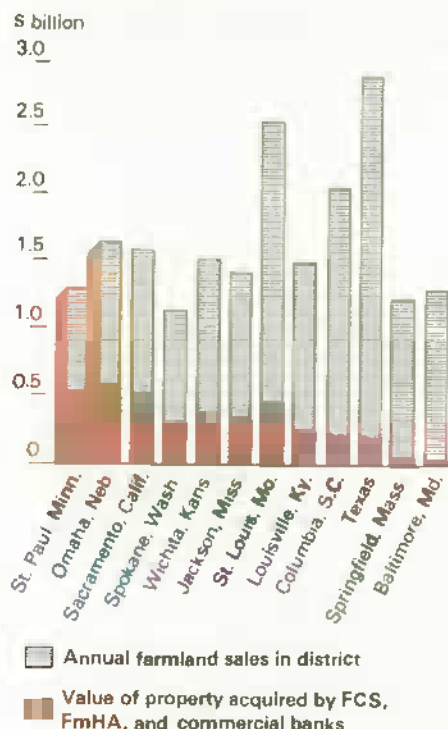
So lender holdings of farmland are an important, but not dominating, factor in the farmland markets. Lenders do not sell all of their holdings in any single year. Consequently, the ratio of acquired property holdings to annual transfers overstates their likely importance. As a group, the life insurance companies, despite their major holdings, have been slow to sell farmland. And FmHA has been hampered in its attempts to sell large quantities by the Congress and the courts.

Large regional differences in holdings exist. So the potential impact of lender holdings of acquired farmland is more important in some areas than others. The value of acquired property in relation to expected annual transfers for the four lender groups is highest in the St. Paul, Omaha, and Sacramento districts of the Farm Credit System.

#### Management Issues Concern Lenders

When lenders take back farms from stressed borrowers, the properties are usually in poor condition, partly because borrowers about to default do not maintain property they will lose.

In Proportion to Total Farmland Sales, Lender-Acquired Property Highest In St. Paul, Omaha Districts



This explains, in part, why the average value of a farm acre held by a lender is only 82 percent of the national average value of farmland.

Management of acquired farm property is a growing problem for lenders. The FCS has tried to sell land inventory as soon as possible without unduly affecting local land values. Being a single-sector lender to a sector under financial stress, the FCS has little choice because it needs the cash flow to help solve its own financial problems.

Commercial bank holdings tend to be scattered among thousands of banks that are often limited by law as to how long they can hold acquired farmland. So most commercial banks seek to sell their land within a fairly short time.

Congress restricts FmHA's sale and management of its inventory. Life insurance companies have taken more of a "wait and see" stance. Some companies are aggressively trying to sell their acquired properties, but most have been content to hold the properties as investments while they watch farmland prices. Life insurance companies have come under increasing scrutiny by rural advocacy groups regarding their management policies. This probably will be a growing problem for all agricultural lenders.

Lender policies on the sale of acquired farmland have generated considerable controversy. Controversy flares especially when the sale involves a large tract sold to an "outsider" or "corporate interest," or when the former owner is evicted without a chance to repurchase the land. The FmHA and FCS have had the most difficulty in this area. Critics maintain that the large amount of acquired property in lenders' hands raises serious questions about who controls the nation's farmland.

Because of the problems with sales, many lenders find themselves in the farm business. Some of the acquired property has been placed in USDA's conservation reserve. Some farms are leased back to the former owners. Many lenders hire professional farm managers to get the highest return possible. Others, notably the life insurance companies, are developing their own land-management units, indicating a longer term commitment to maintaining their stake in the farm sector.

#### Prospects Are Mixed

Lender holdings are still increasing, but at a slower rate. They have not yet peaked, but the credit crunch of the 1980's appears to be easing [see Farm Finance in this issue]. The recent market stabilization and strengthening are helping lenders sell inventory, but no land boom is expected. A large supply of farmland is currently on the market, preventing a rapid recovery in farmland values. Many lenders' sales of acquired properties are made at concessionary loan terms, enabling them to move land without dropping sales prices.

Optimism for land markets stems from expectations of continuing high net cash farm income and low interest rates, which would allow more farmers to finance land purchases. Pessimism stems from the 8 million acres of lender holdings that could be put on the market, and from recognition that price supports or other Government programs could be cut. [Jerome Stam (202) 786-1886, Greg Gajewski 786-1884, and Steven Koenig 786-1889]

#### Upcoming Economic Reports

Summary Released	Title
<b>September</b>	
4	Fruit
10	World Ag. Supply & Demand
11	Sugar & Sweetener
16	Tobacco
17	Wheat
18	Agricultural Outlook
21	Agricultural Resources
23	World Agriculture
25	Rice
<b>October</b>	
8	World Ag. Supply & Demand
9	Econ. Indicators of the Farm Sector
19	Agricultural Outlook
20	Dairy
	Foreign Ag. Trade of the U.S.
23	World Food Needs & Availabilities Update
29	Oil Crops
30	Econ. Indicators of the Farm Sector





## Farm Finance

### OUTLOOK FOR 1987

Nominal 1987 net cash income for farmers could be a record \$54 to \$58 billion, compared with 1986's \$52.0 billion. Cash income is being driven by sharp declines in production expenses and continued growth in direct Federal payments, which more than offset persistent slippage in receipts from crop marketings.

Adjusted for inflation, however, 1987 net cash income is anticipated to remain around one-tenth below the 1970's average and likely will be down slightly from 1986. Net farm income, which considers inventory change and depreciation in addition to cash flows, reached a new nominal high of \$37.5 billion in 1986 and is expected to rise to \$41-\$45 billion this year.

Real estate assets are stabilizing, and equity values may be edging up. The rate of decline in farmland values slowed in late 1986, and values appear to be strengthening in some key agricultural areas in 1987. Farmers are paying off debts and acquiring less new short-term debt than in the past, supporting prospects for gains in net worth.

Commercial Farmers' Financial Stress by Farm Size, Region, & Type, 1986

	Share of farms in category			Share of all	
	With negative net cash income	With debt-asset ratio over 0.40	Vulnerable 2/	U.S. farms 1/	Operator debt 1/
	Percent				
All farms	47	22	10	100	100
Distribution by size					
\$500,000 & above	17	41	7	2	17
\$250,000-499,999	16	39	7	3	14
\$100,000-249,999	17	36	8	14	30
\$40,000-99,999	22	33	10	17	20
\$20,000-39,999	31	20	10	12	6
\$10,000-19,999	45	16	10	12	4
\$9,999 or less	77	12	11	40	9
Distribution by region					
Northeast	51	14	7	8	5
Lake States	37	32	11	12	16
Corn Belt	36	25	11	23	23
Northern Plains	26	33	11	10	14
Appalachia	48	12	7	12	4
Southeast	63	17	11	6	6
Delta	62	19	10	5	4
Southern Plains	68	16	11	11	9
Mountain	52	19	8	6	8
Pacific	60	17	11	7	10
Distribution by type of farm					
Cash grain	34	32	13	23	34
Tobacco, cotton	37	21	9	5	4
Vegetable, fruit, nut	58	17	11	5	9
Nursery, greenhouse	31	14	3	2	1
Other crop	63	18	12	5	4
Beef, hog, sheep	59	15	9	43	27
Dairy	17	31	8	12	18
Poultry	26	32	9	2	2
Other livestock	77	18	16	4	2

1/ Numbers may not add to totals because of rounding. 2/ Both negative net cash income and a debt-asset ratio over 0.40.

Source: 1986 Farm Costs and Returns Survey

### Definitions

**Net cash income.**—Measures the amount of funds generated by the farm business that can be used to pay back principal, expand the business, or pay for family expenses. Calculated as gross cash income minus all cash operating expenses, including interest payments.

**Net farm income.**—Measures the net value of agricultural production, whether it is sold or stored on the farm, and the profit or loss associated with current production. Calculated as adjusted gross cash income, reflecting changes in inventory values, plus nonmoney income, minus total operating expense, including both interest and depreciation of capital stock.

### Expenses Fall, But Gross Income Weakens

Falling production expenses in virtually all categories account for much of the recent income strength. Lower input prices, reduced input use per acre, and a 5-percent decline in planted acres for the eight major program commodities contributed to a record nominal decline of \$11.6 billion in production costs in 1986. The forecast for 1987 cash expenses is \$95.97 billion, down 4 percent from a year earlier and roughly 18 percent below the 1984 peak.

One expenditure category, building and fencing, increased. Greater need for onfarm crop storage and expansion by poultry producers drove up total building expenditures.

While lower expenses are boosting net cash income to record nominal levels, gross cash income is anticipated to fall in 1987, as it did in 1986. Gross cash income is forecast at \$151 to \$153 billion in 1987, compared with \$152 billion in 1986 and \$156.9 billion in 1985.

Crop receipts fell an estimated 14 percent in 1986 and are likely to lose another 5 to 9 percent this year. Reduced crop earnings are most pronounced among wheat, corn, and sorghum producers, dragging down gross cash income for the crops sector as a whole. Federal subsidies are maintaining income for the crop sector. Livestock receipts are indicated slightly higher this year.

#### 1986 Financial Performance Differs Among Farm Operators

The Farm Costs and Returns Survey (FCRS) provides detailed annual financial and operating data. Estimates of cash and net farm income developed for farm operators from the FCRS are conceptually equivalent but methodologically different from ERS estimates for the farm sector as a whole. The data FCRS collects exclude landlord and contractor receipts, which are reported in ERS farm sector income estimates. However, FCRS data provide information on the incidence and distribution of financial stress among farm operators not discernable in the aggregate sector data.

Record net cash income helped farmers pay off some of their total debt in 1986, but continued foreclosures and debt restructuring indicate that not all producers are sharing equally in the recovery. Many farmers who borrowed heavily to begin or expand operations in the late 1970's and early 1980's are now either highly leveraged or technically insolvent (debt-asset ratio greater than 1.0). These farmers may have bills that exceed their cash income (negative cash flow) caused partly by

Distribution of Commercial Farm Debt by Debt-Asset Ratio\*

Year	Debt/asset ratio		
	0.01-0.40	0.41-0.70	Above 0.71
	Percent		
1987	32.9	34.0	33.1
1986	33.7	32.9	33.4
1985	38.1	32.9	29.0

\*January 1, 1985-1987.

Source: 1984, 1985, 1986 Farm Costs and Returns Surveys

high debt-repayment requirements. (See "Potential Loan Losses of Farmers and Lenders" in this issue.)

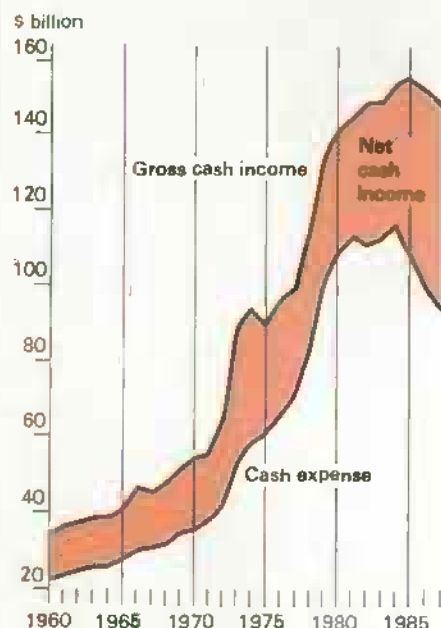
#### Income & Debt Positions Improve

Over 53 percent of all farms had positive net cash income in 1986, compared with under 52 percent in 1985. Over 68 percent of all farm businesses generated positive net farm income in 1986.

Farm operator debt fell 13 percent during 1986, and totaled \$98.5 billion on January 1, 1987. The average debt-asset ratio remained at approximately 0.22. On average, larger farms were more highly leveraged than smaller farms. The highest debt-asset ratios were among cash grain farms, and among farms in the Lake States and Northern Plains, partly because of the continued erosion of asset values.

Nearly two-fifths of all farms were debt-free entering 1987, and another 40 percent had debt-asset ratios less than 0.40. The remaining 21 percent of operators were highly leveraged, the same proportion as in January 1, 1986. In both years, 4 percent of all operators were technically insolvent, with debt exceeding total assets.

Net Cash Income Forecast Record Large



#### Over 40 Percent of Farmers Have Low Debt, Positive Income

Income levels and debt-asset ratios together can provide a useful description of the farm sector's financial health. A farm can be highly leveraged and still be profitable if its income is high enough; a farm with negative income may feel little stress in the short run if it has low debt and can borrow against its current assets.

Ten percent of all farms were vulnerable in 1986 in the sense that they had both a high debt-asset ratio and negative net cash income. In contrast, over 41 percent of all farms had positive net cash income and low debt, putting them in a favorable financial position.

Farms with annual sales of at least \$40,000 improved financially in 1986, with only 9 percent in a vulnerable position at the end of the year. Livestock producers, who gained from lower feed grain prices, were responsible for much of the overall improvement. In contrast, the financial position of

## Financial Health Categories

Income and solvency determine farm businesses' financial health. A farm has favorable income status if it has positive net cash income. A favorable solvency status means a farm's debt-asset ratio is less than 0.40. Based on these measures, four financial health categories can be delineated:

- **Favorable.** These farms have positive income and a debt-asset ratio less than 0.40. These farms are in good short-term financial positions and are considered financially stable.
- **Marginal income.** These farms have negative income but enjoy a

debt-asset ratio less than 0.40. These farms generally face a current income problem, but probably can borrow against existing assets to help meet expenses.

- **Marginal solvency.** These operators have positive income but debt-asset ratios above 0.40. These farms are generating positive returns, despite higher debt repayment requirements.
- **Vulnerable.** These farms face the double difficulty of negative income and a debt-asset ratio above 0.40. These farms are both highly leveraged and have income deficiencies. Their continued viability as farm businesses is questionable.

cash grain farms worsened in 1986, as continued surpluses depressed market prices.

Farms with debt-asset ratios over 0.40 owed more than 67 percent of all operator debt at the end of 1986, approximately the same as a year earlier. The share of debt owed by insolvent farms decreased during the year, however, from 16 to 14 percent.

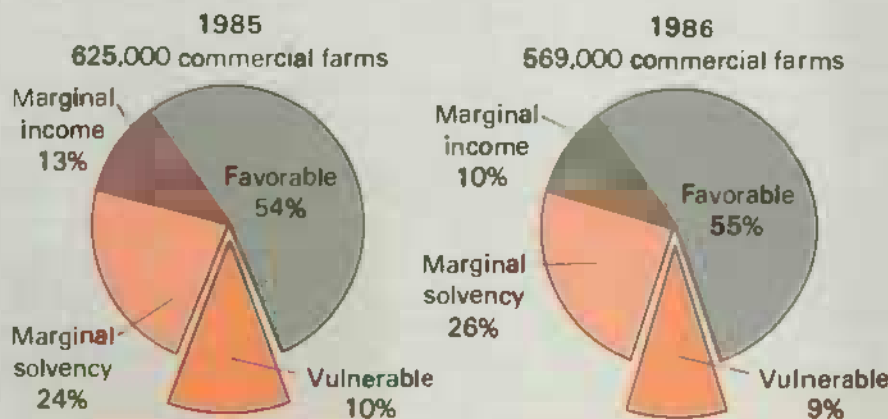
Farmers with both negative income and high debt-asset ratios owed 25 percent of all debt in 1986. Of this debt, cash grain farms owed 36 percent and beef, hog, and sheep farmers owed 31 percent.

## Strong Incomes in 1986 Helped Ease Debt Burdens

In the Corn Belt, Lake States, and Northern Plains, land value declines have eroded asset values in recent years. The relatively high net cash incomes in these regions helped farmers to make debt repayments in 1986 and reduce their debt/asset ratios. These earnings—boosted by a combination of Government loans, large direct Federal payments, and lower input expenses—helped to keep the share of vulnerable farms in these regions at only 1 point above the national average of 10 percent.

Even though about 50 percent of farms in the Northeast, Appalachian, and Mountain regions had negative net cash incomes in 1986, they also had the lowest proportions of farms classified as vulnerable (7-8 percent). The relatively low proportions of farms in these regions with high debt-asset ratios were responsible for this result. [Richard Kofl and Elizabeth Nielsen (202) 786-1801]

## Financial Position of Commercial Farms Improved in 1986



### Type of farm:

37% Cash grain  
29% Beef, hog, or sheep  
17% Dairy  
17% Other

### Region:

26% Corn Belt  
16% Northern Plains  
15% Lake States  
43% Other

### Debt-asset ratio:

49% 0.41-0.70  
22% 0.71-1.0  
29% Over 1.0

### Type of farm:

42% Cash grain  
22% Beef, hog, or sheep  
17% Dairy  
19% Other

### Region:

29% Corn Belt  
15% Northern Plains  
13% Lake States  
43% Other

### Debt-asset ratio:

53% 0.41-0.70  
27% 0.71-1.0  
20% Over 1.0

From 1985 & 1986 Farm Costs and Returns Survey; includes farms with sales over \$40,000.



## POTENTIAL LOAN LOSSES OF FARMERS & LENDERS

The amount of farm debt at risk is down from last year. Potential loan losses could total \$4 billion in 1987, down from \$6.3 billion in 1986 and \$8.6 billion in 1985.

Potential loss is a measure of the amount lenders stand to lose if financially stressed borrowers default on their loans. Loan loss amounts are established using the past due expense for interest plus money lost from selling farmers' assets at less than loan value through forced sale or foreclosure. The amount lenders actually lose has been substantially less in past years, because not all farms in financial difficulty default. Data for estimated financial stress come from the Farm Costs and Returns Survey (FCRS).

While many farmers' loans were past due, foreclosure was not necessarily the best option for lenders to pursue. Lower returns from land, coupled with poor future income prospects, caused asset values in many cases to decline by 50-60 percent. A lender could typically expect to recover only 60 to 70 percent of the original loan value through foreclosure.

Estimates of potential loan loss can be made by classifying farms according to their debt-asset ratio and their debt-service ratio. Farms with *debt-asset* ratios above 0.40 are considered to have high debt; with ratios above 0.70, to have very high debt; and with ratios above 1.0, to be technically insolvent.

The *debt-service* ratio is cash flow before interest expense, divided by interest expense plus estimated principal payments due on outstanding loans. A ratio of greater than 1.0 means

Potential FCS and FmHA Losses from Loans to Commercial Farms,  
January 1, 1987

FCS district	Potential loan loss		Lender's share of all potential losses in district	
	FCS	FmHA	FCS	FmHA
	\$ million		Percent	
St. Paul	495	323	38	25
Omaha	297	363	28	24
Wichita	226	201	32	28
Sacramento	97	30	23	7
St. Louis	102	260	19	49
Louisville	135	103	37	28
Columbia	53	256	15	70
Spokane	36	85	18	42
Jackson	21	191	8	70
Texas	174	110	18	12
Baltimore	11	13	33	39
Springfield	16	20	36	43
United States	1,665	1,954	26	31

Source: Farm Costs and Returns Survey

Lenders' Potential Losses from Loans to Commercial farms, January 1, 1987

Lender	Total potential losses	Share of U.S.	Share of debt-at-risk receiving no debt service	Share of lender debt
	\$ million		Percent	
FmHA	1,950	31	43	16
Comm. banks	1,600	29	33	8
FCS	1,670	26	24	7
Individ- uals	440	7	32	4
Other lenders	450	7	55	5
Total	6,310	100	35	7

Source: Farm Costs and Returns Survey

Potential Lender Loan Losses for Selected State Groups

	Farms with potential losses		Incidence of stress*	
	1985	1987	1985	1987
	Number		Percent	
Iowa, Minn., Wisc., Mo.	37,700	36,600	21	22
Kan., Neb., N. Dak., S. Dak.	21,100	15,400	19	16
Ill., Ind., Mich., Ohio	17,400	12,500	16	13
Ark., La., Okla., Texas	12,600	14,400	16	22
Ala., Ga., Miss., N.C.	8,800	7,600	18	21
Calif., Ore., Wash. N.J., N.Y., Penn.	6,000	4,200	16	10
	4,600	2,900	11	8
Total	108,200	93,600	18.4	17.2
United States	122,500	104,100	17.0	16.5

\*Share of farms in the region with potential loan losses.

## One-Sixth of Commercial Farms Had One-Third of Debt in 1986

Debt-service category <sup>1</sup>	Debt-asset ratio					All commercial farms
	No debt (0)	Low debt (less than .4)	High debt (.4-.7)	Very high debt (.7-1.0)	Insolvent (more than 1.0)	
Full service						334,400 farms (53 percent) \$37.7 billion debt (44 percent)
Partial service	Financial strength 526,700 commercial farms (83 percent of all commercial farms) \$56.7 billion debt (67 percent of all debt)			Financial stress with \$5.3 billion potential lender loss 104,000 commercial farms (17 percent of all commercial farms) \$29.4 billion debt (33 percent of all debt)		112,200 farms (18 percent) \$28.9 billion debt (35 percent)
No service						184,200 farms (29 percent) \$18.5 billion debt (22 percent)
All commercial farms	120,900 farms (19 percent) \$0 debt (0 percent)	294,700 farms (47 percent) \$28.4 billion debt (31 percent)	122,900 farms (19 percent) \$29.1 billion debt (34 percent)	\$6,000 farms (9 percent) \$17.5 billion debt (21 percent)	37,300 farms (6 percent) \$12.1 billion debt (14 percent)	830,800 farms <sup>2</sup> (100 percent) \$85.1 billion debt (100 percent)

<sup>1</sup>Extent to which farmers met repayment schedules of principal and interest.

<sup>2</sup>U.S. totals estimated from farms surveyed in early 1987 with sales or value of production greater than \$40,000.

ties, but are solvent because they have more assets than debt, despite defaulting. Another 37,000 are insolvent. If their farms were liquidated, they would not have sufficient assets to repay their debts. Loan losses from the latter group constitute 90 percent (\$5.6 billion) of the potential loan losses of all farms with sales greater than \$40,000.

The Farmers Home Administration (FmHA), the cooperative Farm Credit System (FCS), and commercial banks provide 60 percent of agricultural financing. However, they are likely to experience 80-90 percent of the potential loan losses among commercial farmers in 1987. From 1984 through 1986, FmHA experienced considerably lower actual loan losses than the Farm Credit System and commercial banks: \$400 million in 1986 for FmHA, compared with \$1.4 billion for FCS and \$1.2 billion for commercial banks.

### FmHA Potential Losses Higher

Unlike the other two financial lenders, FmHA is choosing to hold onto vulnerable debt rather than liquidate it. This greater retention has caused FmHA to have higher potential losses for 1986 and 1987 than the other two lenders, despite having much lower remaining potential losses in 1985.

Of the debt at risk held by FmHA, 43 percent is unserviced (no principal or interest payments made from farm or farm family earnings), compared with 33 percent for commercial banks and only 24 percent for the FCS. During the rest of the 1980's, FmHA may charge off 16 percent of its commercial farm debt portfolio as actual losses, compared with only 7 percent for all lenders put together. (See Resources article, "Lenders Hold 8 Million Farm Acres," in this issue.)

Two sources of difficulty plague lenders: small average losses on a large number of smaller loans, and substantial losses on a small number of very large loans. The volume of loan losses found in each size class is disproportional to the number of farms.

For example, although medium-sized farms with sales of \$40,000-\$250,000 account for about 84 percent of all commercial farms, they generate only

Estimated Lender Losses From Loans to Commercial Farms, 1984-86

Lender	1984	1985	1986
\$ million			
Commercial banks 1/	900	1,300	1,200
Farm Credit System	428	1,105	1,400
FmHA	55	300	400
Life Ins. Co.,			
Individuals,			
& other lenders	600	1,400	2,000
Total loan losses	2,000	4,000	5,000

1/ Non-real estate loan losses only. 2/ Estimate. Since loan losses by these lenders are not reported, an estimate was made by assuming the same rate of charge-offs to outstanding loans as occurred for those lending institutions that reported their loan write-downs. See Melicher, *Federal Reserve Bulletin*, July 1987.

cash is available for debt service, family living, and maintenance and improvements. A ratio less than 1.0 means the farmer would have difficulty servicing debt.

A farmer is considered to be in financial danger if the farm's debt burden and debt service meet one of the following three conditions:

- the farmer is technically insolvent (debts larger than assets) and therefore in danger of financial failure regardless of cash flows;
- the farmer has very high debts and a cash flow sufficient to service interest and principal payments only partially; or,

- the farmer has very high debts and cannot service any of the debt repayment obligations.

Sixteen percent of the farmers surveyed in early 1987 fit one or more of these descriptions. They had one-third of the total debt of the farm sector.

### One-Sixth of Commercial Farmers' Debt Is at Risk

Based on the FCRS, between 100,000 and 110,000 farms with sales greater than \$40,000 could default on their loans. These financially stressed operators represent one-sixth of all commercial farms. Of these, 67,000 are experiencing severe cash flow difficul-

64 percent of all potential loan losses for 1987. The largest farms, with sales over \$1,000,000, account for 16 percent of potential losses, despite comprising only 2 percent of the number of farms. While farms with sales over \$1,000,000 have an average potential loan loss of \$631,000, those with sales between \$500,000 and \$999,999 have sustained an average potential loan loss of only \$88,000.

### Stress Is Regionalized

Both the Farm Credit System and Farmers Home Administration will sustain massive loan losses in the Midwest, Southeast, and Southern Plains regions.

During the 1980's, land prices in the upper Midwest declined by 45 to 65 percent. The declines caused the Farm Credit System's proportion of loan losses in the St. Paul, Omaha, and Wichita FCS districts to increase by 11 percent in 1986. FmHA's potential losses in these regions behaved similarly. However, land prices are beginning to stabilize because of brighter income prospects.

In the Southern Plains, the incidence of financial stress among farmers increased from 16 to 22 percent between 1984 and 1986. Reduced agricultural commodity prices coupled with lower oil prices caused land prices in Texas to decline dramatically—26 percent

between 1985 and 1986. This drop caused the Texas district FCS office to sustain an increase in loan loss potential of \$100 million so far in 1987.

In 1986, 80 percent of loans vulnerable to loss in the Southeast remained unserviced. Drought last year imposed further financial hardships. Losses on individual loans in the Southeast are likely to be higher than in other regions.

The FmHA will probably suffer its worst problems in the Southeast. Nearly three-fifths of FmHA debt in 11 Southeastern States was unserviced in 1986. Loan losses were attributed mostly to farmers' cash flow problems, which cause a large frequency of default, rather than to land price declines. Land prices in the Southeast decreased only moderately during the 1980's, in contrast to the severe land price declines in the Midwest.

In the upper Midwest, Southeast, and Southern Plains, potential loan losses are expected to remain high or increase. In all other States, potential losses are expected to decline. U.S. potential loan losses are likely to decline from \$6.3 billion at the beginning of 1987 to only \$4.0 billion at the end. This credit crisis of the 1980's seems to be moderating.

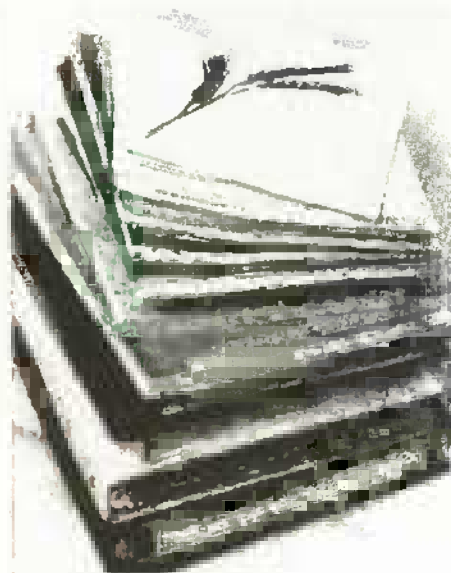
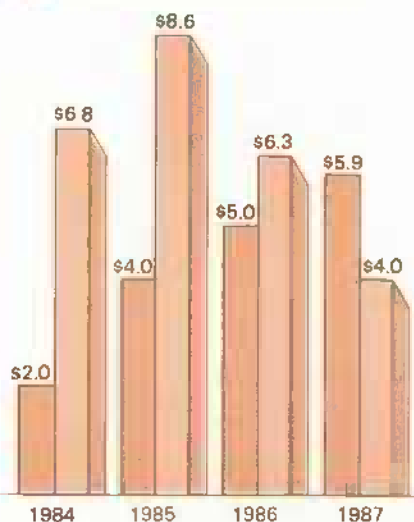
Potential losses dropped dramatically in the Eastern Corn Belt and Northern Plains between 1985 and 1987. The decline resulted from higher earnings due to record corn and soybean yields in both 1985 and 1986; the strong turnaround in hog and cattle prices in 1986; and acceleration of loan restructuring, write-offs, and foreclosures, which removed many vulnerable loans from the books.

In the Eastern and Pacific Coast States, firmer land prices and the continuing strength in dairy, fruit, and vegetable earnings boosted farmers' finances, reducing potential losses in 1987. [Greg Hansen and Bill Serletis (202) 786-1804]

Farm Lenders' Potential Loan Losses Are Dropping

\$ billion

Actual loan losses during year  
Potential loan losses at end of year



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## Policies for Boosting Third World Grain Imports

The United States, remembering the export boom of the 1970's and worried about the lean fare of the 1980's, is intently watching for signs of growth in world agricultural trade. U.S. exporters are particularly eyeing developing countries. The developing countries' agricultural imports grew rapidly during the 1970's, but slowed during the early 1980's as their rates of economic growth dropped with the global recession, inflation, and their debt crises.

U.S. policies exacerbated the slump in export sales to the third world by reducing the U.S. share of the shrinking global trade total. U.S. support prices were high, pricing commodities out of the world market. In addition, a high-valued dollar made U.S. goods even more expensive to other countries.

### *Banking Crisis or Economic Development Problem?*

Initially, the third world debt crisis of the early 1980's was viewed as a banking crisis. For nine large U.S. banks, loans to Latin America equaled 176 percent of their combined capital. Because loan losses could have made these banks insolvent, widespread default was a serious threat to the U.S. banking system. (These banks now have sufficient reserves set aside to withstand pressures from default.)

Besides being a danger to the countries themselves and to the banks that supported them, the crisis threatened other U.S. interests, including agriculture. Third world markets

for U.S. exporters, including farmers, would have contracted immediately if the developing countries had defaulted on their debts. In the longer run, new development capital would have dried up following default, limiting income growth. Income growth has been essential in creating new export markets for farm products.

The international financial community, the debtor countries, and the U.S. Government have debated how to resolve the debt crisis. Efforts have included:

- activities to reduce annual debt-service payments,
- steps by debtor countries to improve export earnings and reduce import expenditures, and
- actions to provide the additional capital needed for the debtor countries to resume rapid economic growth.

*Reducing annual debt service payments.*—Third world countries' annual debt-service requirements can be reduced in several ways. One is to stretch out the repayment schedule. A second is to forgive part of the debt when it is clear that the country cannot repay the whole loan. The banks can take the loss, or Congress could vote a bailout for the banks. The latter is probably unlikely, though, given the large budget deficits of the U.S. Government.

Banks may have reservations about forgiving debt because of political repercussions. If some countries are forgiven their debt, then other countries, including those able to meet their obligations, may also demand to have their debt forgiven.

Expansion of the market for debt-equity swaps can help reduce external debt in developing countries. These swaps begin with an investor purchasing the loan at a discount from the lender. The discounted loan is then exchanged at the central bank of the debtor country for local currency. The currency is next used to purchase assets in the debtor country.

The net effect of the swap is that the country's external debt is reduced, and the bank which sold the debt has removed the shaky loan from its account. If the bank wishes to have direct investments in the debtor country, it can make the equity investment itself. Finally, debtor countries might buy their own debt if the discount became large enough, thus repaying their loans cheaply.

A lower valued dollar helps reduce the burden of debt. Another way of reducing debt-service payments is to lower U.S. interest rates, since the interest due on many third world loans is linked to U.S. rates. Interest payments in 1985 absorbed 36 percent of export earnings in Latin America, where much of the third world debt is concentrated. U.S. interest rates could be reduced by U.S. Government actions to increase the money supply; however, this would affect many parts of the economy and could even accelerate inflation. Another possibility is that lender banks could directly cut rates charged to third world borrowers.

*Improving the trade balance of debtor countries.*—The heavily indebted developing countries are often required by the International Monetary Fund (IMF) to reduce imports and increase exports to generate the foreign exchange needed for debt-service payments. These actions can reduce U.S.

exports and even increase the supplies of competing grain on the international markets if the third world country is a grain exporter.

Countries wishing to reduce imports to save foreign exchange have two options. The first is to raise the domestic price of imports by devaluing their domestic currency, thus helping to induce people to switch from foreign to domestic products. The second is to limit imports by using tariffs, quotas, and other restrictions.

Export expansion for the debtor countries can occur only if other nations absorb the debtors' exports. If U.S. lenders are to be repaid and more U.S. exports purchased, then the United States must buy the debtor countries' exports.

U.S. economic growth was the world's "engine of growth" in the 1980's. U.S. imports expanded rapidly with higher domestic consumption, while U.S. exports remained low because of stagnant overseas demand. Lower economic growth rates in Western Europe and Japan caused developing-country manufacturers to shift their exports to the United States. The United States now consumes 60 percent of the third world's exports of manufactured goods, compared with 40 percent in 1980. These competing imports give rise to calls for increased protectionism from nonagricultural interests.

Besides tropical products not grown in the United States (such as coffee and tea), third world exports to the U.S. include some agricultural products that are grown here, such as fruits and vegetables. These competing imports underlie a potential conflict between overseas farmers growing crops for export, such as grains and oilseeds, and U.S. producers whose crops compete with imports.

U.S. growers of grains and oilseeds likely would see their volume of sales rise under free trade. U.S. consumers would benefit from lower prices for agricultural commodities not grown here, such as tea, coffee, and spices. However, U.S. growers of agricultural products competing with imports, such as sugar, fruits, vegetables, meats, and dairy products, can argue that their interests are better served by trade limits.

*Capital for economic development.*—Developing countries need outside capital if they are to make economic progress. They generally have an abundance of cheap labor and natural resources, but lack the capital with which to take advantage of their economic resources.

As their economies grow, developing countries expect to expand their trade and acquire the foreign currency needed to service their debts and purchase investment goods. However, with the falling prices of the 1981-82 recession and the rising interest rates, many developing countries could not both service their debt and continue domestic investment.

This shortage of foreign currency was exacerbated in the early 1980's as third world nations prepared to devalue their currency. Developing-country residents with money to invest began exporting capital to Western Europe and the

United States to avoid the devaluation. This export of capital as economic conditions worsen is referred to as capital flight. It requires the exchange of domestic currency for the currency of the country where the foreigner will send his capital. For the United States, this means the foreign country will have fewer U.S. dollars for purchasing U.S. agricultural and manufactured products.

Mexico, Argentina, and Venezuela exported significant capital in the early 1980's. For example, in 1981-82, capital export by Venezuela was two-and-one-half times the increase in its foreign external debt. Capital flight from developing countries has slowed recently with the stabilization of economic conditions.

Nevertheless, investment in many developing countries has fallen to pre-1970's levels, and economic growth has declined. Financing is needed for capital investments and for imports of equipment and materials. At issue is how to provide more money so that growth can resume.

In addition to seeking more foreign aid, debtor countries secure additional capital by changing their laws to allow more direct foreign investment. Following World War II, the capital flow to the developing countries was largely direct equity investments by multinational companies, and capital transfers by governments and international agencies. During the third world borrowing boom of the 1970's, lent capital made direct equity investment less important. Now, the third world seeks to embrace policies to invite more foreign investment.

Equity investment and official transfers are important because commercial lenders are wary; heavily indebted countries are considered poor credit risks. Developing countries are paying more on old loans than they are getting in new loans. This trend is most striking in Latin America, where debtor countries have paid out \$100 billion since 1982, about as much as they received in net lending from 1974 to 1981.

### *U.S. Assistance Can Promote Development*

The United States has long assisted developing countries, both to achieve U.S. foreign policy objectives and to help these countries become our commercial trading partners. Two programs to achieve these objectives are food aid under P.L. 480 and general development aid through the U.S. Agency for International Development (USAID) and various international agencies such as the World Bank.

U.S. farm groups watch the programs of USAID, the World Bank, and other international agencies, because some assistance goes for agricultural development in recipient countries. Some U.S. groups fear that boosting the third world's food productivity could mean fewer purchases from the United States, or increased competition in the international marketplace.

However, development assistance to agriculture is crucial. In developing countries, the agricultural sector is frequently the most important one for the initial stage of development. Because agriculture is the largest sector in most developing countries, it must grow if the national economies are to prosper.

Some countries have encouraged investment in light industry, such as textiles and shoes, ahead of agriculture. But developing countries' attempts to industrialize their economies have not succeeded while they have ignored the low productivity of their subsistence agricultural sectors. The record is much better when countries have focused on improving the productivity of all their resources, including agricultural land and labor. Examples include Japan and South Korea.

Increased agricultural productivity raises a developing country's farm income and supplies food and raw materials for processing. Nonfarm income then rises as the higher farm income creates demand for local goods and services. Agriculture can prime the pump of the whole economy. As farming becomes more efficient, fewer workers are required, freeing them for nonfarm jobs. At this stage, alternative sources of employment are critical.

Competition with U.S. farm products may well occur with improved third world agricultural productivity. But as an economy becomes more advanced and specialized, a developing region or country must import those products not grown locally. The income from the export of locally grown crops helps make this possible. Thus, the country becomes a potential U.S. customer for other products.

Brazil is a good example. It has become a very strong competitor in the international soybean market and a low-cost orange juice exporter to the United States. However, Brazil has been one of the largest wheat importers in the developing world and has shifted from an exporter of corn to an importer for the last decade. Brazil's development resulted in greater competition for U.S. soybean and orange producers, but larger markets for U.S. grains.

#### ***U.S. Lowers Its Export Prices***

Domestic farm policies of the early 1980's kept U.S. export prices from adjusting to the rising dollar and the reduced demand, and falling commodity prices of the 1981-82 world recession. This made the United States a "residual supplier" for grains and resulted in a loss of competitiveness and market share.

Declining U.S. export volumes and rising Government stocks during the 1982-85 crop years led to provisions in the Food Security Act of 1985 for loan rate reductions. In addition, there were mandatory marketing loans for upland cotton and rice; discretionary marketing loans for wheat, coarse grains, and soybeans; generic certificates; and expanded export promotion programs.

With implementation of the 1985 act, the U.S. is meeting world prices and having an impact on governments and farmers throughout the developing world. Some third world exporters have attempted to increase the volume of their exports to offset the decline in prices. For developing countries importing these crops, these lower prices have resulted in a savings of foreign exchange.

At the farm level, lower prices are contributing to financial stress in some countries. Lower prices reduce incentives for farmers and for governments in some developing countries to invest in agricultural production.

Lower market prices imply higher costs for the governments of exporting countries that use export subsidies in combination with support prices, including the United States. For the EC, this financial burden is further increased when the U.S. dollar falls relative to their currencies, since this lowers U.S. export prices.

#### ***International Financial Markets Can Affect Farm Trade***

Changes in U.S. policies affecting financial markets and inflation can significantly affect agricultural trade. The U.S. Government reduced inflation by restricting the growth of the money supply from late 1979 through the early 1980's, simultaneously running record budget deficits. Consequently, U.S. interest rates rose. Private investment and the large federal budget deficit exceeded private savings.

High interest rates induced foreign investors to make up this shortfall of domestic savings by purchasing U.S. assets. These assets included stocks, bonds, and other financial and physical properties. If these investors had not brought their funds to the United States, U.S. interest rates would have gone much higher in order to cut private investment to match savings, or the federal deficit would have had to be greatly reduced.

The foreign investors made these purchases by first exchanging their own currencies for U.S. dollars. This boosted the demand for dollars and increased the supply of foreign currencies in the foreign exchange markets. With the demand for dollars and the supply of foreign currencies rising, the value (i.e., the exchange rate) of the U.S. dollar rose, and that of foreign currencies declined.

Thus, the public decisions and private financial transactions that allowed the federal deficit and private investment to exceed private savings led to a higher valued dollar. This made it easier for foreign producers, including developing-country farmers, to be the low-cost suppliers for U.S. consumers. This higher valued dollar also made it easier for U.S. competitors to be the low-cost suppliers of products, including grains and oilseeds, to developing countries.

#### ***U.S. Farmers Can Share In World Trade Growth***

Growth of third world grain imports slowed when developing countries' income growth slowed and they faced problems with international debt. Developing countries seek to resume their rapid economic growth.

The United States and other developed countries can promote economic growth in the third world by reducing trade restrictions and debt burdens and increasing capital flows. The recent adjustment in U.S. agriculture, while very painful, has reduced production costs, lowered prices, and placed the United States in a position to capture a large share of prospective growth of grain imports by the developing countries. [Gary Vocke (202) 786-1706]





## Marketing Loans vs. Other Program Options for Wheat, Feed Grains, & Soybeans

When farm prices are below support levels, marketing loans allow participating producers to repay price support loans at less than the loan rates, without reducing the income that the loan rates guarantee. This encourages producers to redeem and then sell commodities which had been pledged for price support loans, rather than forfeiting them to the CCC.

The Food Security Act of 1985 gives the Secretary of Agriculture authority to implement several programs to enhance market competitiveness and reduce surplus supplies of major program commodities, including provisions for loan rate reductions; mandatory marketing loans for upland cotton and rice; discretionary marketing loans for wheat, feed grains, and soybeans; issuance of generic certificates; and expanded export promotions.

Marketing loans for rice and upland cotton during 1986/87, by lowering prices, allowed the United States to regain share of world markets for these commodities that it enjoyed in the early 1980's. But CCC outlays associated with the marketing loans are estimated to exceed \$635 million for 1986/87. Nevertheless, cotton and rice export successes under marketing loans have raised strong interest in what such loans could do for wheat, feed grains, and soybeans.

The Farm Disaster Assistance Act of 1987, passed in May, provided that if marketing loan programs were not established for 1987 wheat, feed grain, and soybean crops, the Secretary of Agriculture must explain why to Congress.<sup>1</sup>

<sup>1</sup> This article condenses a report entitled *An Assessment of Marketing Loan Program Options*, which was sent to Congress on July 31, 1987. Copies of the full report may be obtained by calling (202) 786-1880.

Two questions about marketing loans' usefulness for these crops are paramount: (1) What would the loans cost per additional bushel demanded? (2) Would marketing loans be more effective than other options, such as generic certificates, the Export Enhancement Program (EEP), and lower support levels?

### Marketing Loan Outlays Would Be Large

If the Secretary implemented marketing loans for wheat, feed grains, and soybeans during 1987/88 without generic certificates, additional cash outlays would be between \$935 million and \$2.2 billion.

Marketing loans would increase loan placements. The cost estimates above assume that all production from program harvested area for wheat (1.83 billion bushels) and for corn (5.75 billion bushels), as well as the entire soybean crop (1.83 billion bushels), would be placed under loan if there were marketing loans.

Forfeitures of old crop loan collateral could rise with lower prices. On the plus side, lower market prices would increase exports and domestic use. Lower feed costs would increase feed use and expand livestock output.

Consequently, estimating costs of marketing loans depends on assumptions about responses of exports and domestic feed use—whether demand would be high or low. Without a significant demand response, the total cost of marketing loans would be very high because the loan costs accrue on all bushels eligible for price support loans, not just on those additionally demanded.

A marketing loan for wheat in 1987/88 could cost from about \$325 million with a high demand response, to \$455 million with a low response. For feed grains, costs would

#### Repayment Levels for Program Commodities

Commodity	Loan repayment rate when world market price is below the loan rate
Rice	Whichever is higher: (a) the world market price, or (b) 50 percent of the loan rate in 1986 and 1987, 60 percent in 1988, and 70 percent in 1989 and 1990.
Upland cotton	
Plan A	The world market price, but no less than 80 percent of the loan rate.
Plan B	The world market price, but for the 1987-1990 crops, the Secretary may establish a minimum repayment rate between the world price and 80 percent of the loan rate.
Wheat & feed grains	Whichever is higher: (a) the world market price, or (b) 70 percent of the basic loan rate.
Soybeans	The world market price.

range from \$600 million for the high response to \$1.1 billion for the low, with 85 to 90 percent of costs for corn.

With a high demand response, a marketing loan could boost total wheat disappearance by 72 million bushels in 1987/88. About 85 percent of this would be exported. For corn, total disappearance under a high demand response would rise by about 340 million bushels, of which two-thirds would be fed domestically.

Gross CCC outlays for marketing loans would not vary with different export and domestic feed use responses, but loan forfeitures, repayment losses, and storage costs would fall as exports and domestic feed use rose, reducing net CCC outlays. With a high demand response, marketing loan costs per-additional-bushel-demanded would be \$4.50 for wheat and \$1.55 for corn.

With a low demand response, a marketing loan might boost total demand by only 21 million bushels for wheat and 151 million for corn. These lower responses would greatly increase the cost per-additional-bushel-demanded—to about \$21 for wheat and \$6.20 for corn. As of mid-August, these costs were nearly nine times the domestic cash price for wheat (Kansas City, No. 2 Hard Red Winter) and 4.5 times the cash price for corn (Central Illinois, No. 2 yellow).

#### **World Prices Would Determine Soybean Marketing Loan Costs**

Marketing loan cost estimates for soybeans are sensitive to the world price. For instance, with a loan rate of \$4.77 and a world price of \$4.25 per bushel, the cost for a marketing loan would range from \$340 million with a high demand response (120 million bushels) to \$644 million with a low response (59 million bushels).

With a world price closer to the loan rate, costs would be significantly lower. In addition, forfeitures of old soybeans pledged as collateral for 1986 loans would steadily rise as a marketing loan pushed prices below the support level. At a world price of \$4.25 a bushel, such CCC loss of repayments on forfeited loans could total an additional \$250 to \$350 million.

Implementing a marketing loan for the 1987 soybean crop could be costly if the world price dropped appreciably, but factors other than cost should be considered. First, lowering the loan rate for corn while the loan rate for soybeans is held at the statutory minimum of \$4.50 a bushel or slightly higher could put soybeans at a disadvantage in both domestic and foreign markets. Second, while the use of generic certificates and the EEP are encouraging market competitiveness for some program commodities, they have had little effect on soybeans.

The nonrecourse loan and purchase program for soybeans indirectly provides support for nonprogram oilseeds such as sunflowers and cottonseed. By removing the price floor provided by the soybean loan rate, a soybean marketing loan would lower prices and raise use for these oilseeds as well. And, if marketing loans were extended to sunflowers, the estimated cost for 1987/88 would range from \$5 million at a world soybean price of \$4.75 a bushel, to \$26 million at a price of \$4.25. Costs for a cottonseed marketing loan would range from \$9 to \$47 million.

#### **Estimated Marketing Loan Outlays for the 1987 Soybean Crop**

Demand response	Assumed world price		
	\$4.25	\$4.50	\$4.75
High demand response 1/ Export response (mil. bu.)	43	22	1.6
Domestic crush response (mil. bu.)	77	40	2.9
Net marketing loan outlays (mil.)	\$340	\$176	\$13
Per bushel net marketing loan outlay	\$2.85	\$2.85	\$2.85
Low demand response 2/ Export response (mil. bu.)	21	11	0.8
Domestic crush response (mil. bu.)	38	20	1.5
Net marketing loan outlays (mil.)	\$644	\$335	\$25
Per bushel net marketing loan outlay	\$10.82	\$10.82	\$10.82

1/ Assumes an export demand elasticity of -0.60 and a domestic crush elasticity of -0.60. 2/ Assumes an export demand elasticity of -0.30 and a domestic crush elasticity of -0.30.

#### **Estimated Marketing Loan Outlays for the 1987 Crops of Wheat & Feed Grains**

Commodity and item	Demand response	
	High 1/	Low 2/
Wheat		
Export response (mil. bu.)	61	15
Domestic feed use response (mil. bu.)	11	6
Net marketing loan outlays (mil.)	\$323	\$455
Per bushel net marketing loan outlay	\$4.48	\$20.90
Corn		
Export response (mil. bu.)	116	39
Domestic feed use response (mil. bu.)	225	112
Net marketing loan outlays (mil.)	\$525	\$937
Per bushel net marketing loan outlay	\$1.54	\$6.20
Grain (sorghum, barley, oats, & rye)		
Net marketing loan outlays (mil.)	\$74	\$160
Total net marketing loan outlays (mil.)	\$922	\$1,552

1/ For wheat, assumes an export demand elasticity of -0.80 and a domestic feed use elasticity of -0.50. For corn, these elasticities are -0.60 and -0.40. 2/ For wheat, assumes an export demand elasticity of -0.20 and a domestic feed use elasticity of -0.30. For corn, these elasticities are both -0.20.

A critical assumption for all of the marketing loan cost estimates is that farm prices for program commodities would be at or below loan repayment levels during 1987/88. If supply and demand conditions were such that prices were between loan rates and minimum loan repayment levels, then marketing loan costs would be less than those presented.

#### **Marketing Loans Compared with Lowering Support Levels for Wheat and Feed Grains**

The 1985 act does not establish absolute minimum loan rates for wheat and feed grains, but it does for rice,

Projected Costs for Commodity Programs, CCC Outlays, 1987 1/

Commodity	High demand response			Low demand response	
	Base program outlays 2/	Marketing loan outlays	Base program outlays with marketing loans	Marketing loan outlays	Base program outlays with marketing loans
\$ million					
Wheat	3,786	323	4,109	455	4,241
Corn	9,277	525	9,802	937	10,214
Grain sorghum	718	38	754	92	810
Barley	334	46	380	62	396
Oats	32	(11)	21	3	35
Rye	7	2	9	3	10
Soybeans #					
\$4.25	158	340	497	644	802
\$4.50	158	176	334	335	493
\$4.75	158	13	171	25	183
Total with soybeans #					
\$4.25	14,312	1,261	15,573	2,196	16,508
\$4.50	14,312	1,098	15,410	1,887	16,199
\$4.75	14,312	935	15,247	1,577	15,889

1/ Includes direct and indirect payments to be made in cash only. 2/ Program outlay estimates presented in the President's Budget, February 1987, for fiscal 1988, except for wheat. Wheat base outlays were computed by weighting cost estimates for fiscal 1987 by one-third and for fiscal 1988 by two-thirds.

soybeans, and upland cotton. For rice, the minimum through 1990 is \$6.50 per cwt; for soybeans, \$4.50 per bushel; and for cotton, 50 cents per pound.

Since support levels for wheat and feed grains can be set at 20 percent below basic loan rates, the Secretary has greater flexibility in implementing annual programs for them. A marketing loan for soybeans would remove \$4.50 as a price floor, but would create the potential for significantly increased program expenditures. However, because the law states that loan repayment rates under a marketing loan for wheat and feed grains can be no less than 70 percent of basic loan rates, the possibility for lowering price floors for them is less than for rice, cotton, and soybeans.

Marketing loans for wheat and feed grains would be analogous to further modest reductions in support levels. By contrast, for rice and cotton, marketing loans have the potential for significantly enhancing price competitiveness. Depending on world prices, the same could be true for soybeans.

#### Marketing Loans Compared With Generic Certificates

Generic certificates likely lowered the farm price for corn during 1986/87 by about the same amount as a marketing loan would have. Also, certificate exchanges probably reduced wheat prices by more than a marketing loan would have. Certificates may have lowered 1986-crop grain sorghum prices, but they appear to have had no impact on farm prices for barley, oats, rye, and soybeans. For these crops, marketing loans could have resulted in a greater reduction in prices, particularly for soybeans.

Use of generic certificates is estimated to have lowered the average farm price for corn by 10 to 15 cents a bushel during 1986/87. The average farm price for corn for the

year is estimated at \$1.51 a bushel. For wheat, use of certificates is estimated to have reduced the average farm price by 2 to 8 cents a bushel. The average farm price for wheat during 1986/87 was \$2.42.

Whether a marketing loan program without certificates would have had a greater impact on farm prices than certificates depends on the commodity. U.S. stocks of corn and wheat were at record highs at the beginning of 1986/87, and the corn crop exceeded expected use by 12 percent, pushing domestic corn prices well below the effective \$1.84 loan rate. Certificate exchanges for corn kept prices below the loan rate longer than they would have been otherwise. Without generic certificates, the corn price likely would have averaged \$1.65 to \$1.70 a bushel. Had a marketing loan been implemented for corn during 1986/87 without certificates, the corn price likely would have fallen to or below the loan repayment rate of \$1.68 a bushel, which is about the same as the probable price for corn without certificates.

For wheat, a marketing loan likely would have had less effect on prices than generic certificates. Prices generally exceeded the loan rate during most of 1986/87, so the loan program was not a barrier to wheat sales. However, implementation of a marketing loan could have changed the global pricing and trading environment from what actually occurred in 1986/87. For example, predatory pricing or competitors' dumping stocks could have intensified the effect of a marketing loan.

The 1986/87 wheat crop was 5 percent less than the total use of 2.2 billion bushels. With a marketing loan, all production (1.68 billion bushels) on program harvested area would have been eligible for a loan. As it was, about 515



million bushels were placed under loan, and 345 million of these had been redeemed by July 29, 1987. Very little 1986-crop wheat has been forfeited to CCC to date.

The difference between the quantity of wheat actually placed under loan and what could have been placed with a marketing loan was about 1.2 billion bushels. With this amount not under loan, prices dropped only slightly below the \$2.30 loan rate, and only for a short period following harvest. Had these 1.2 billion bushels been placed under loan, most or all would have been redeemed, leaving free stocks unchanged.

Generic certificates can free up stocks that marketing loans cannot. Marketing loans allow producers to redeem only current crop-year commodities, whereas generic certificate exchanges also can free up crops pledged as collateral for loans in previous years and stocks owned by CCC.

Over one-third of the 476 million bushels of wheat for which certificates were exchanged during 1986/87 came from CCC inventories that a marketing loan program would not have reached. Without the CCC exchanges, wheat prices during 1986/87 could have been even higher, particularly during the fourth quarter. Over 72 percent of the 161 million bushels of wheat exchanged from CCC inventories during 1986/87 was freed to the market during the March-May quarter.

#### ***Marketing Loans Compared with the EEP***

The Export Enhancement Program mandated through fiscal 1988, has played a significant role in lowering U.S. export prices for wheat and barley. The EEP may be more cost-effective than marketing loans. This is because the cost of EEP-induced exports is paid only on bushels shipped, while a marketing loan could be paid on all bushels eligible for a loan.

For instance, average EEP bonuses for wheat are estimated to be about 82 cents a bushel for 1987/88, much less than the estimated \$4.50 to \$20.90 cost per-additional-bushel-demanded if there were a marketing loan for 1987/88.

EEP sales were an estimated 25 percent of total U.S. wheat exports during 1985/86, or about 240 million bushels. Most of the wheat sold through EEP in its first year went to North African and Middle Eastern markets where European Community sales had been concentrated. In 1986/87, an estimated 40 percent of wheat exports were induced by the EEP. And the EEP impact has accounted for 90 percent of the 137 million bushels of U.S. barley exported this season. Virtually all of the barley was purchased by Saudi Arabia. The Soviet Union is expected to purchase 147 million bushels of wheat through the program in 1987/88.

Marketing loans could enhance price competitiveness here and abroad for U.S. wheat, feed grains, and soybeans, but the Secretary has not implemented them because they could be very costly. For wheat and feed grains, such loans likely would not enhance competitiveness more than other programs have. [Michael Hanthorn and Joe Glauber (202) 786-1840]



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# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1986		1987					1988	
	IV	Annual	I	II	III F	IV F	Annual F	I F	Annual F
Prices received by farmers (1977=100)	122	123	122	128	126	124	125	--	--
Livestock & products	144	138	143	148	145	141	144	--	--
Crops	99	106	100	107	107	106	105	--	--
Prices paid by farmers, (1977=100)									
Prod. items	142	145	143	147	149	147	147	--	--
Commodities & services, int., taxes, & wages	158	159	159	162	164	163	162	--	--
Cash receipts (\$ bil) 1/	148	136	130	127	128	--	131-133	--	--
Livestock (\$ bil)	73	72	73	72	78	72	72-74	--	--
Crops (\$ bil)	75	64	57	55	59	64	58-60	--	--
Market basket (1967=100)									
Retail cost	294	289	299	303	300	298	300	--	--
Farm value	243	234	234	245	235	230	236	--	--
Spread	324	321	337	336	337	337	337	--	--
Farm value/retail cost (%)	30	30	29	30	30	30	30	--	--
Retail Prices (1967=100)									
Food	324	320	330	332	334	334	332	--	--
At home	310	305	316	319	318	316	317	--	--
Away-from home	366	360	370	372	378	381	375	--	--
Agricultural exports (\$ bil) 2/	7.7	26.3	6.8	7.2	5.7	7.9	27.5	7.0	--
Agricultural imports (\$ bil) 2/	5.1	20.9	5.3	5.0	4.6	4.8	20.0	5.0	--
Production: *									
Red meat (mil lb)	9,752	39,051	9,485	9,238	9,706	9,770	38,199	9,560	38,350
Poultry (mil lb)	4,603	17,929	4,533	4,840	5,170	5,030	19,673	4,865	20,675
Eggs (mil doz)	1,487	5,715	1,443	1,433	1,425	1,470	5,771	1,430	5,750
Milk (bil lb)	33.9	144.1	34.8	37.3	35.4	34.1	141.7	38.6	146.0
Consumption, per capita:									
Red meat and poultry (lbs)	55.1	214.3	52.4	52.7	54.5	55.8	215.6	53.7	221.8
Corn beginning stocks (mil bu) 3/	4,039.5	4,039.5	10,304.1	8,248.2	6,331.7	4,929.0	4,929.0	--	--
Corn use (mil bu) 3/	1,989.0	6,496.0	2,057.6	1,917.0	1,403.1	--	--	--	--
Prices: 4/									
Choice steers--Omaha (\$/cwt)	60.36	57.75	60.46	68.60	63-65	61-65	63-65	60-66	61-67
Barrows and gilts--7 mks. (\$/cwt)	53.08	51.19	48.11	56.17	55-57	43-47	50-52	39-45	37-43
Broilers--12-city (cts/lb)	56.2	56.9	50.0	48.2	45-47	42-46	46-48	40-46	40-46
Eggs--NY Gr. A large (cts/doz)	74.0	71.1	64.8	58.9	59-61	63-67	61-63	60-66	60-66
Milk--all at plant (\$/cwt)	13.33	12.52	12.90	12.07	12.20-	12.90-	12.50-	12.00-	11.70-
					12.50	13.50	12.75	12.80	12.50
Wheat--Kansas city HRW (\$/bu)	2.65	2.93	2.80	2.84	--	--	--	--	--
Corn--Chicago (\$/bu)	1.62	2.35	1.56	1.82	--	--	--	--	--
Soybeans--Chicago (\$/bu)	4.86	5.11	4.87	5.37	--	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	48.0	60.0	55.5	64.7	--	--	--	--	--
	1979	1980	1981	1982 R	1983 R	1984 R	1985 R	1986 R	1987 F
Gross cash income (\$ bil)	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	151-153
Gross cash expenses (\$ bil)	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	95-97
Net cash income (\$ bil)	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	54-58
Net farm income (\$ bil)	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	41-45
Farm real estate values (1977=100) 5/	125	145	158	157	148	146	128	112	103

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ As of February 1. F = forecast. R = revised. \* = commercial production.

Table 2.—U.S. Gross National Product & Related Data

	Annual			1986			1987	
	1984 R	1985 R	1986 R	II R	III R	IV R	I R	II P
\$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,772.2	4,010.3	4,235.0	4,211.6	4,265.9	4,288.1	4,377.7	4,448.8
Personal consumption expenditures	2,430.5	2,629.4	2,799.8	2,765.8	2,837.1	2,858.6	2,893.8	2,944.0
Durable goods	335.5	368.7	402.4	386.4	427.6	419.8	396.1	409.7
Nondurable goods	867.3	913.1	939.4	934.3	940.0	946.3	969.9	977.0
Clothing & shoes	146.7	157.2	167.5	167.2	169.8	169.6	174.0	175.4
Food & beverages	448.5	472.8	497.8	494.7	499.6	507.5	514.8	511.6
Services	1,227.6	1,347.5	1,458.0	1,445.1	1,469.5	1,492.4	1,527.7	1,557.3
Gross private domestic investment	664.8	641.6	671.0	679.4	660.8	660.2	699.9	702.3
Fixed investment	597.1	631.6	655.2	651.9	657.3	666.6	648.2	658.8
Change in business inventories	67.7	10.0	15.7	27.5	3.5	-6.4	51.6	43.5
Net exports of goods & services	-58.9	-79.2	-105.5	-100.8	-110.5	-116.9	-112.2	-108.6
Government purchases of goods & services	735.9	818.6	869.7	867.2	878.5	886.3	896.2	911.2
1982 \$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,501.4	3,607.5	3,713.3	3,704.7	3,718.0	3,731.5	3,772.2	3,796.4
Personal consumption expenditures	2,249.3	2,352.6	2,450.5	2,434.3	2,477.5	2,480.5	2,475.9	2,488.7
Durable goods	323.1	352.7	383.5	369.6	405.5	399.0	375.9	386.2
Nondurable goods	825.9	849.5	877.2	880.0	879.8	880.3	883.2	873.6
Clothing & shoes	142.2	147.9	158.0	159.0	160.4	158.4	160.3	155.5
Food & beverages	422.8	436.5	444.9	447.3	442.2	444.0	447.5	438.9
Services	1,100.3	1,150.4	1,189.8	1,184.7	1,192.2	1,201.1	1,216.8	1,228.9
Gross private domestic investment	658.4	636.1	654.0	665.6	645.0	631.0	671.8	673.4
Fixed investment	586.1	628.7	640.2	637.6	638.8	645.4	624.2	632.2
Change in business inventories	62.3	7.4	13.8	28.1	6.1	-14.4	47.6	41.2
Net exports of goods & services	-84.0	-108.2	-145.8	-146.8	-161.6	-151.8	-135.2	-127.8
Government purchases of goods & services	677.7	726.9	754.5	751.6	757.2	771.8	759.6	762.2
GNP implicit price deflator								
% change	3.7	3.2	2.6	2.9	3.6	.7	4.2	3.8
Disposable personal income (\$bil)	2,668.6	2,841.1	3,022.1	3,022.4	3,038.2	3,061.6	3,125.9	3,138.5
Disposable per. income (1982 \$bil)	2,469.8	2,542.2	2,645.1	2,660.2	2,653.2	2,656.7	2,674.6	2,653.1
Per capita disposable per. income (\$)	11,257	11,872	12,508	12,525	12,560	12,626	12,865	12,891
Per capita dis. per. income (1982 \$)	10,419	10,622	10,947	11,024	10,968	10,956	11,008	10,897
U.S. population, total, incl. military abroad (mil)	237.1	239.3	241.5	241.3	241.9	242.5	243.0	243.6
Civilian population (mil)	234.9	237.0	239.4	239.1	239.6	240.2	240.7	241.5
	Annual			1986			1987	
	1984	1985	1986	June	Mar	Apr	May	June
Monthly data seasonally adjusted								
Industrial production (1977=100)	121.4	123.8	125.1	124.2	127.3	127.3	128.0	128.2
Leading economic indicators (1967=100)	165.3	168.6	179.3	178.3	187.7	188.0	188.9	190.4
Civilian employment (mil. persons)	105.0	107.2	109.6	109.6	111.4	111.8	112.4	112.3
Civilian unemployment rate (%)	7.5	7.2	7.0	7.1	6.6	6.3	6.3	6.1
Personal income (\$ bil annual rate)	3,108.7	3,327.0	3,534.3	3,528.1	3,683.4	3,700.3	3,717.8	3,731.0
Money stock-M2 (daily avg) (\$bil) 1/	2,373.7	2,566.5	2,799.8	2,667.5	2,824.7	2,839.1	2,840.1	2,843.2
Three-month Treasury bill rate (%)	9.58	7.48	5.98	6.21	5.56	5.76	5.75	5.69
Aaa corporate bond yield (Moody's) (%)	12.71	11.37	9.02	9.13	8.36	8.85	9.33	9.32
Housing starts (thou) 2/	1,750	1,742	1,805	1,842	1,730	1,643	1,602	1,590
Auto sales at retail, total (mil)	10.4	11.0	11.4	10.8	10.3	10.5	9.6	10.0
Business inventory/sales ratio	1.48	1.50	1.54	1.55	1.49	1.50	1.51	--
Sales of all retail stores (\$ bil)	107.5	115.0	121.2	119.7	124.6	125.0	124.5 P	125.1
Nondurable goods stores (\$ bil)	68.5	71.8	73.8	73.7	76.7	76.8	76.9 P	77.0
Food stores (\$ bil)	22.6	23.7	24.6	24.6	25.2	25.3	25.1 P	25.1
Eating & drinking places (\$ bil)	10.4	11.1	12.1	12.0	12.8	12.7	12.8 P	12.7
Apparel & accessory stores (\$ bil)	5.6	6.2	6.7	6.7	7.2	7.0	6.9 P	7.1

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. R = revised.

Information contact: James Malley (202) 786-1283.



Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings.

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986 P	1987 F
Annual Percent Change										
Total foreign										
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.0	2.5
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.3	21.1	11.7	25.5
Export earnings	27.5	14.6	22.6	-2.2	-6.8	-2.5	5.6	1.3	12.5	11.3
Developed less U.S.										
Real GNP	4.8	3.1	2.3	1.3	1.1	1.0	3.4	3.3	2.4	2.2
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.7	2.9	2.6
Export earnings	23.0	14.0	17.0	-3.3	-4.2	-0.5	6.1	4.7	19.4	11.7
Centrally Planned										
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.6
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	1.8	7.6
Latin America										
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	1.4
CPI	23.5	53.7	61.3	64.8	72.6	126.2	174.3	179.2	90.9	241.1
Export earnings	28.1	12.8	30.1	4.8	-9.7	-0.1	7.7	-6.1	-15.1	3.5
Africa & Middle East										
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	1.1	0.1	1.1	0.1
CPI	8.7	16.4	22.1	18.7	12.0	18.0	5.9	5.3	8.2	8.5
Export earnings	48.6	43.2	38.5	-7.0	-18.0	-17.2	-8.4	-7.8	-25.7	13.0
Asia										
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	5.5
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.4	4.9	5.6
Export earnings	30.1	19.4	27.3	5.0	-0.6	3.5	13.3	-1.7	7.2	10.7

P = Preliminary. F = forecast.

Information contact: Timothy Baxter (202) 786-1688.

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1986	1987					
	1984	1985	1986	July	Feb	Mar	Apr	May	June R	June P
1977=100										
Prices received										
All farm products	142	128	123	125	122	123	125	129	131	128
All crops	139	120	106	106	99	102	102	109	111	106
Food grains	144	133	109	90	102	102	103	105	97	91
Feed grains & hay	145	122	98	97	78	80	84	92	90	86
Feed grains	148	122	96	97	74	77	79	85	87	82
Cotton	108	93	91	102	79	83	87	107	118	117
Tobacco	183	153	138	139	131	131	130	130	130	130
Oil-bearing crops	109	84	77	77	72	72	74	78	80	78
Fruit, all	202	181	167	173	175	170	166	170	199	168
Fresh market 1/	220	192	175	182	182	177	173	178	212	177
Commercial vegetables	135	127	129	118	141	158	141	137	128	136
Fresh market	133	122	123	109	137	160	139	132	120	133
Potatoes & dry beans	157	124	114	160	126	132	143	174	173	171
Livestock & products	146	136	138	143	144	142	147	148	150	150
Meat animals	151	142	145	152	155	156	165	169	173	172
Dairy products	139	131	129	124	133	129	127	124	123	123
Poultry & eggs	135	119	128	142	115	111	112	107	104	105
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	165	163	159	159	--	--	162	--	--	164
Production items	155	151	145	144	--	--	147	--	--	149
Feed	135	116	108	107	--	--	101	--	--	105
Feeder livestock	154	154	153	154	--	--	179	--	--	182
Seed	151	153	148	146	--	--	149	--	--	149
Fertilizer	143	135	124	125	--	--	117	--	--	117
Agricultural chemicals	128	128	127	126	--	--	123	--	--	123
Fuels & energy	201	201	162	152	--	--	164	--	--	170
Fare & motor supplies	147	146	144	144	--	--	145	--	--	145
Autos & trucks	182	193	198	197	--	--	210	--	--	212
Tractors & self-propelled machinery	181	178	174	175	--	--	174	--	--	174
Other machinery	180	183	184	184	--	--	186	--	--	186
Building & fencing	138	136	136	136	--	--	136	--	--	136
Fare services & cash rent	152	150	150	150	--	--	148	--	--	148
Interest payable per acre on farm real estate debt	257	238	213	213	--	--	207	--	--	207
Taxes payable per acre on farm real estate	132	133	134	134	--	--	136	--	--	136
Wage rates (seasonally adjusted)	151	154	160	166	--	--	171	--	--	171
Production items, interest, taxes, & wage rates	162	157	151	151	--	--	153	--	--	154
Ratio, prices received to prices paid 2/	86	79	77	79	77	77	77	80	81	78
Prices received (1910-14=100)	650	585	560	572	558	560	573	589	597	586
Prices paid, etc. (Parity Index) (1910-14=100)	1,132	1,120	1,097	1,097	--	--	1,116	--	--	1,127
Parity ratio (1910-14=100) 2/	57	52	51	52	--	--	51	--	--	52

1/ Fresh market for noncitrus: fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. P = preliminary. R = revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices received by farmers, U.S. average

	Annual*			1986	1987					
	1984	1985	1986	July	Feb	Mar	Apr	May	June R	July P
<b>Crops</b>										
All wheat (\$/bu)	3.46	3.20	2.71	2.25	2.58	2.58	2.62	2.66	2.45	2.30
Rice, rough (\$/cwt)	8.32	7.85	5.04	3.86	3.80	3.68	3.64	3.74	3.68	3.53
Corn (\$/bu)	3.05	2.49	1.98	2.00	1.42	1.47	1.52	1.66	1.69	1.59
Sorghum (\$/cwt)	4.60	3.97	3.11	3.06	2.36	2.45	2.58	2.69	2.80	2.92
All hay, baled (\$/ton)	75.38	69.93	61.80	58.40	58.10	57.90	62.90	73.30	63.20	61.60
Soybeans (\$/bu)	7.02	5.42	5.00	5.11	4.68	4.73	4.80	5.20	5.36	5.20
Cotton, Upland (cts/lb)	65.6	56.1	54.7	61.5	47.7	50.0	52.6	64.8	71.5	71.1
Potatoes (\$/cwt)	5.69	3.92	4.94	6.83	4.91	5.28	5.91	7.45	7.43	7.24
Lettuce (\$/cwt)	11.00	10.90	11.90	8.44	9.05	15.30	9.22	8.54	8.71	15.10
Tomatoes (\$/cwt)	25.60	24.10	25.10	20.00	25.80	32.10	26.90	28.30	26.00	24.60
Onions (\$/cwt)	11.70	9.97	9.80	11.30	16.70	19.40	26.30	23.10	17.00	15.80
Dry edible beans (\$/cwt)	18.70	17.60	19.00	17.30	20.30	19.10	17.80	18.00	17.60	18.70
Apples for fresh use (cts/lb)	15.5	17.3	NA	28.0	19.5	19.6	19.4	21.4	25.7	25.3
Pears for fresh use (\$/ton)	300.00	349.00	393.00	280.00	407.00	403.00	355.00	338.00	630.00	295.00
Oranges, all uses (\$/box) 1/	5.95	7.41	4.18	3.63	4.75	4.79	4.94	5.26	6.22	4.58
Grapefruit, all uses (\$/box) 1/	2.68	4.01	4.21	6.17	4.55	4.76	5.21	4.41	5.08	4.50
<b>Livestock</b>										
Beef cattle (\$/cwt)	57.56	53.96	52.84	52.90	58.80	59.30	62.60	63.00	62.50	62.30
Calves (\$/cwt)	60.23	62.40	60.89	59.40	70.60	72.50	75.10	77.30	78.80	80.70
Hogs (\$/cwt)	47.61	43.88	50.10	59.00	48.20	47.40	50.80	54.40	60.30	59.40
Lands (\$/cwt)	60.33	68.07	69.10	71.90	76.00	80.80	86.10	90.10	83.50	78.30
All milk, sold to plants (\$/cwt)	13.46	12.75	12.50	12.00	12.80	12.50	12.30	12.00	11.90	11.90
- Milk, manuf. grade (\$/cwt)	12.49	11.72	11.46	10.90	11.60	11.30	11.20	11.00	10.90	10.90
Broilers (cts/lb)	33.7	30.1	34.5	42.7	30.1	29.1	29.6	30.0	27.6	28.1
Eggs (cts/doz) 2/	70.3	57.4	60.3	59.0	58.3	54.4	55.6	50.1	50.9	51.4
Turkeys (cts/lb)	46.6	47.2	44.4	49.3	35.3	37.6	36.5	35.0	34.5	33.1
Wool (cts/lb) 3/	79.5	63.3	66.8	67.5	59.6	71.0	96.8	111.0	94.9	86.6

1/ Equivalent on-tree returns. 2/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 3/ Average local market price, excluding incentive payments. \*Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. P = preliminary, R = revised, NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

## Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual*	1986			1987 1/					
	1986	June	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Consumer price index, all items	328.4	327.9	330.8	331.1	333.1	334.4	335.8	337.7	338.7	340.1
Consumer price index, less food	328.6	328.6	330.4	330.6	332.2	333.6	335.4	337.3	338.3	339.6
All food	319.7	317.1	324.6	325.2	328.8	330.1	330.0	331.0	332.5	334.1
Food away from home	360.1	360.2	365.8	367.1	368.6	369.6	370.9	371.5	372.3	373.8
Food at home	305.3	301.6	309.9	310.2	315.2	316.6	315.8	316.9	318.8	320.4
Meats 2/	273.9	264.4	285.4	286.3	288.6	285.3	286.4	286.9	291.8	297.1
Beef & veal	271.4	264.9	277.6	279.5	282.8	280.7	282.7	285.8	292.6	297.6
Pork	273.8	257.0	295.6	294.2	294.0	289.8	287.2	284.4	289.4	297.7
Poultry	232.7	223.7	245.2	241.9	238.4	237.0	234.1	231.1	230.5	228.3
Fish	443.2	434.5	449.7	457.6	478.0	479.9	487.4	488.7	486.6	484.2
Eggs	186.3	166.9	195.8	198.6	193.2	187.4	180.0	174.6	169.5	161.2
Dairy products 3/	258.4	257.2	261.2	262.2	263.3	264.7	263.7	263.2	264.3	263.7
Fats & oils 4/	287.8	287.0	285.4	286.0	293.2	290.3	294.6	291.8	293.3	291.4
Fresh fruit	369.3	372.4	360.6	355.8	389.1	406.7	403.9	417.8	431.8	437.5
Processed fruit 5/	163.3	161.4	162.0	163.1	165.7	166.3	167.5	168.4	170.5	171.0
Fresh vegetables	330.3	326.2	338.9	342.5	356.3	377.7	364.7	379.4	379.0	396.3
Potatoes	307.3	317.3	325.7	332.0	340.1	357.0	355.3	371.4	406.1	436.1
Processed vegetables 5/	147.4	148.0	146.5	147.4	150.2	148.5	152.1	150.6	151.2	151.9
Cereals & bakery products 5/	325.8	326.1	328.5	329.5	331.5	332.7	333.2	335.6	336.5	337.0
Sugar & sweets	411.1	411.5	412.4	411.8	415.8	415.8	417.2	417.4	417.7	419.3
Beverages, nonalcoholic	478.2	480.0	476.9	470.2	482.6	481.9	475.4	469.8	467.9	462.6
Apparel commodities less footwear	188.8	184.8	194.4	191.7	187.7	189.0	196.1	199.8	198.5	194.7
Footwear	211.2	210.0	215.1	214.0	209.9	211.0	216.5	219.2	220.8	218.8
Tobacco & smoking products	351.0	347.1	357.3	357.6	364.9	368.3	369.6	370.4	370.9	372.7
Beverages, alcoholic	238.7	240.1	240.5	240.8	242.5	243.2	243.6	244.3	245.0	245.9

1/ Beginning January 1987 the CPIs are calculated using 1982-84 expenditure patterns and updated population weights. The old series were based on 1972-73 expenditure patterns. 2/ Beef, veal, lamb, pork, and processed meat. 3/ Includes butter. 4/ Excludes butter. 5/ December 1977=100.

Information contact: Ralph Parlett (202) 786-1870.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1986	1987					
	1984	1985	1986 P	June	Jan	Feb R	Mar <sub>2</sub>	Apr	May	June
	1967=100									
Finished goods 1/	291.1	293.7	289.7	288.3	291.8	292.3	292.3	295.0	296.3	296.8
Consumer foods	273.3	271.2	274.1	275.1	280.1	280.8	280.4	283.3	286.7	287.7
Fresh fruit	253.0	256.1	262.1	271.6	256.5	261.3	266.9	250.3	251.1	260.3
Fresh & dried vegetables	278.3	245.1	241.1	232.7	225.7	237.2	260.0	258.5	252.2	284.9
Dried fruit	386.6	363.5	377.4	374.0	383.6	385.1	384.9	384.9	384.9	383.6
Canned fruit & juice	312.4	323.1	315.1	316.9	322.5	322.1	324.7	321.4	324.5	331.1
Frozen fruit & juice	351.0	362.3	314.8	309.3	335.9	335.3	335.5	341.3	341.7	343.1
Fresh veg. excl. potatoes	219.1	205.9	204.0	186.8	174.9	188.6	213.2	209.8	193.8	214.0
Canned veg. and juices	252.6	246.9	245.1	250.3	247.1	248.9	256.8	256.4	251.3	257.5
Frozen vegetables	291.0	298.4	288.5	298.5	300.2	301.2	300.6	302.6	302.3	296.9
Potatoes	397.7	304.3	312.6	335.4	369.6	355.8	362.1	366.1	413.1	397.4
Eggs	210.8	171.0	177.9	149.0	176.9	175.6	160.3	161.0	150.9	143.2
Bakery products	299.1	313.7	321.3	321.6	321.9	321.3	322.0	321.8	323.2	324.8
Meats	236.8	227.8	235.2	227.7	238.4	240.0	234.4	250.6	265.0	269.1
Beef & veal	237.1	221.3	216.0	208.0	216.9	222.7	224.0	240.0	251.4	248.7
Pork	226.5	223.8	250.8	245.5	250.4	246.2	228.2	254.0	279.3	295.5
Processed poultry	206.0	197.3	207.8	201.9	197.0	192.2	187.4	188.8	192.9	183.3
Fish	476.0	484.2	530.4	522.9	589.1	608.8	610.8	581.7	640.0	602.9
Dairy products	251.7	249.4	248.8	247.0	253.5	252.3	252.6	252.5	250.7	251.0
Processed fruits & vegetables	294.3	296.3	287.8	289.2	294.4	295.1	298.5	298.7	297.5	300.1
Shortening & cooking oils	311.6	290.6	242.4	239.9	239.6	239.9	238.7	239.7	244.8	242.7
Consumer finished goods less foods	294.1	297.3	283.5	284.4	284.4	285.3	285.7	288.8	289.6	290.1
Beverages, alcoholic	209.8	213.0	217.8	217.9	217.1	219.3	218.6	220.5	219.5	220.2
Soft drinks	340.2	343.6	349.7	349.2	352.1	353.7	356.3	357.9	356.7	356.5
Apparel	201.3	204.1	206.5	206.7	207.9	208.3	208.6	208.8	209.0	210.1
Footwear	251.7	256.7	261.8	260.7	264.6	263.5	265.5	264.9	266.5	263.4
Tobacco products	398.4	428.1	460.4	451.7	487.1	487.4	487.8	487.5	487.5	487.5
Intermediate materials 2/	320.0	318.7	307.6	306.8	307.0	308.9	309.4	310.9	312.7	314.8
Materials for food manufacturing	271.1	258.8	251.0	247.9	251.1	251.6	250.0	255.3	261.5	261.2
Flour	185.2	183.0	173.4	175.9	165.2	169.0	169.1	171.1	177.4	168.9
Refined sugar 3/	173.5	165.6	166.4	164.9	168.6	169.5	169.2	171.3	170.8	171.9
Crude vegetable oils	262.2	219.6	135.8	138.7	127.4	129.1	131.3	129.1	144.6	134.1
Crude materials 4/	330.8	306.1	280.3	276.8	284.2	287.2	287.7	295.5	304.7	304.9
Foodstuffs & feedstuffs	259.5	235.0	231.0	227.1	227.6	229.9	229.1	239.4	251.3	246.5
Fruits & vegetables 5/	278.1	260.5	261.2	260.7	249.7	258.6	274.3	265.8	262.4	285.5
Grains	239.7	202.8	167.2	182.2	140.9	140.6	142.3	149.8	166.6	156.0
Livestock	251.8	229.9	236.1	225.1	240.0	247.1	245.9	267.1	280.5	280.9
Poultry, live	240.6	226.2	248.8	236.6	212.3	199.8	199.5	202.0	216.4	180.7
Fibers, plant & animal	228.4	197.8	179.3	219.5	192.3	188.9	182.4	199.6	220.6	235.7
Fluid milk	278.3	264.6	256.8	250.1	271.5	267.4	260.5	256.1	252.5	249.0
Oilseeds	253.3	202.7	196.2	202.2	202.2	201.6	199.8	206.7	223.5	226.6
Tobacco, leaf	274.6	274.1	243.0	248.4	229.1	230.8	230.8	229.1	229.1	229.1
Sugar, raw cane	312.0	291.3	292.2	293.8	299.7	304.8	305.9	307.1	308.1	309.0
All commodities	310.3	308.7	299.8	298.0	300.9	302.2	302.8	305.1	307.3	308.5
Industrial commodities	322.6	323.8	312.1	311.8	313.5	314.9	315.8	317.4	318.6	320.2
All foods 6/	269.2	264.5	268.4	265.4	269.9	270.9	270.3	273.3	277.7	278.5
Farm products &										
Processed foods & feeds	262.4	250.5	252.0	249.8	251.6	252.8	251.9	257.0	263.6	263.0
Farm products	255.8	230.8	224.7	222.6	220.8	222.9	222.7	231.3	241.1	239.1
Processed foods & feeds 6/	265.0	260.4	265.1	263.2	266.8	267.6	266.4	269.8	274.7	274.8
Cereal & bakery products	270.5	279.9	281.8	281.9	279.6	281.1	281.5	282.0	284.2	283.4
Sugar & confectionery	301.2	291.0	295.7	294.9	298.8	298.8	298.7	300.3	301.2	304.5
Beverages	273.1	276.6	294.3	296.8	289.3	289.9	289.5	291.2	290.3	290.4

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977=100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977=100). R = revised. P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913.



# Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual				1986	1987					
	1983	1984	1985	1986	June	Jan	Feb	Mar	Apr	May	June
Market basket 1/											
Retail cost (1967=100)	268.7	278.3	282.6	288.7	284.8	295.3	298.1	298.8	299.8	302.7	305.7
Farm value (1967=100)	242.3	255.4	237.2	234.1	224.9	232.0	234.2	236.5	240.1	246.8	249.1
Farm-retail spread (1967=100)	284.3	293.3	308.3	320.8	319.7	337.3	337.2	335.5	334.9	335.5	338.9
Farm value/retail cost (%)	33.4	33.8	31.1	30.0	28.3	28.8	28.0	28.3	29.7	30.2	30.2
Meat products											
Retail cost (1967=100)	267.2	268.1	285.9	273.8	264.4	288.3	285.3	286.1	285.5	291.5	297.7
Farm value (1967=100)	235.8	241.5	221.8	229.1	218.3	223.8	231.2	232.4	245.2	260.5	270.1
Farm-retail spread (1967=100)	304.0	299.1	316.6	326.2	317.2	363.9	348.6	349.0	332.6	327.8	330.1
Farm value/retail cost (%)	47.6	48.6	45.1	45.1	44.7	41.9	43.7	43.8	46.3	48.2	48.8
Dairy products											
Retail cost (1967=100)	250.0	253.2	258.0	258.4	257.2	263.2	264.3	263.2	263.0	263.7	263.2
Farm value (1967=100)	262.1	258.9	248.2	241.5	236.9	252.0	252.3	245.5	241.8	238.0	233.8
Farm-retail spread (1967=100)	239.3	248.3	266.8	273.3	275.0	273.0	274.8	278.7	281.6	286.3	288.0
Farm value/retail cost (%)	48.0	47.8	48.0	43.7	43.1	44.8	44.6	43.6	43.0	42.2	41.5
Poultry											
Retail cost (1967=100)	197.5	218.5	218.4	232.7	223.7	238.3	237.0	234.1	230.7	230.4	228.6
Farm value (1967=100)	213.0	248.8	234.8	235.4	253.8	221.7	218.7	214.6	215.8	216.0	201.9
Farm-retail spread (1967=100)	182.4	188.1	188.4	210.9	194.5	254.4	256.6	253.0	245.2	244.3	254.4
Farm value/retail cost (%)	53.1	56.3	53.4	54.0	55.8	45.8	48.0	45.1	46.0	46.1	43.4
Eggs											
Retail cost (1967=100)	187.1	208.0	174.3	186.3	166.9	183.5	187.2	180.3	175.0	169.9	161.5
Farm value (1967=100)	206.1	230.3	178.9	182.7	150.3	184.4	179.2	164.9	166.7	143.7	147.5
Farm-retail spread (1967=100)	159.5	178.2	187.0	177.1	180.9	206.5	198.8	202.6	197.0	207.8	181.7
Farm value/retail cost (%)	65.1	65.1	60.7	61.1	63.2	56.3	56.6	54.0	56.3	50.0	54.0
Cereal & bakery products											
Retail cost (1967=100)	292.5	305.2	317.0	325.8	328.1	321.2	332.3	332.9	335.0	335.6	336.3
Farm value (1967=100)	186.8	192.0	175.8	142.3	138.0	128.4	130.4	131.5	131.0	133.8	127.7
Farm-retail spread (1967=100)	314.0	328.7	346.2	383.7	364.8	373.2	374.1	374.6	377.2	377.4	379.5
Farm value/retail cost (%)	11.1	10.8	8.5	7.8	7.3	6.7	8.7	6.8	6.7	6.8	6.8
Fresh fruits											
Retail cost (1967=100)	303.6	345.3	383.6	390.1	395.3	412.2	427.1	429.2	442.1	464.4	476.2
Farm value (1967=100)	220.6	315.1	302.7	285.3	281.8	283.0	304.8	282.5	257.3	297.8	312.1
Farm-retail spread (1967=100)	340.8	358.9	419.8	437.1	446.3	470.2	482.0	495.1	525.1	539.2	549.9
Farm value/retail cost (%)	22.5	28.3	24.4	22.7	22.1	21.3	22.1	20.4	18.0	18.9	20.3
Fresh vegetables											
Retail cost (1967=100)	289.3	331.8	317.5	330.3	326.2	355.4	374.4	363.6	378.0	376.0	395.4
Farm value (1967=100)	267.4	298.7	256.7	247.8	209.8	310.9	266.9	288.8	301.5	293.4	314.7
Farm-retail spread (1967=100)	314.3	347.4	346.1	369.2	380.9	376.3	428.0	384.1	414.0	414.8	433.3
Farm value/retail cost (%)	28.6	28.8	25.8	24.0	20.8	28.0	22.8	26.3	25.5	25.0	25.4
Processed fruits & vegetables											
Retail cost (1967=100)	288.8	306.1	314.1	309.1	307.8	314.8	313.0	317.9	317.0	319.0	320.2
Farm value (1967=100)	350.5	343.5	378.5	326.3	321.2	358.7	363.4	369.5	365.6	364.7	360.4
Farm-retail spread (1967=100)	286.2	297.8	299.9	305.3	305.0	304.6	301.8	306.5	306.5	308.9	311.3
Farm value/retail cost (%)	18.9	20.3	21.8	18.1	18.9	20.7	21.0	21.1	20.8	20.7	20.4
Fats & oils											
Retail cost (1967=100)	263.1	288.0	294.4	287.8	287.0	293.4	289.9	293.9	291.4	292.8	291.8
Farm value (1967=100)	251.0	324.8	271.3	199.1	203.3	198.9	189.0	192.5	188.1	198.3	188.6
Farm-retail spread (1967=100)	267.8	273.9	303.3	321.9	318.2	329.8	328.7	332.8	331.3	329.1	331.5
Farm value/retail cost (%)	26.8	31.3	29.6	19.4	19.7	18.8	18.1	18.2	17.8	18.8	18.0

	Annual				1986	1987					
	1983	1984	1985	1986	June	Jan.	Feb	Mar	Apr	May	June
Beef, Choice											
Retail price 2/ (cts/lb)	236.1	239.6	232.8	230.7	226.6	236.6	233.8	233.6	236.8	243.4	248.4
Net carcass value 3/ (cets)	145.4	147.6	138.2	133.1	129.7	134.0	137.5	139.5	150.9	158.8	157.6
Net farm value 4/ (cets)	136.2	140.0	126.8	128.4	113.3	128.7	131.7	133.4	143.7	150.8	148.7
Farm-retail spread (cets)	101.9	99.6	105.8	106.3	113.3	110.9	101.9	100.2	93.1	92.5	100.7
Carcass-retail spread 5/ (cets)	92.7	92.0	97.4	97.6	100.8	102.6	96.1	94.1	85.9	83.5	91.8
Farm-carcass spread 6/ (cets)	9.2	7.6	8.4	8.7	12.4	8.3	8.8	6.1	7.2	9.0	8.9
Farm value/retail Price (%)	57	58	55	54	50	53	56	57	61	62	60
Pork											
Retail price 2/ (cts/lb)	169.8	162.0	162.0	178.4	166.5	188.1	185.8	181.3	178.9	183.7	187.6
Wholesale value 3/ (cets)	108.8	110.1	101.1	110.9	112.2	105.4	103.8	102.2	108.4	117.0	124.3
Net farm value 4/ (cets)	78.9	77.4	71.4	82.4	89.8	75.7	77.8	76.8	82.7	89.2	98.2
Farm-retail spread (cets)	83.3	84.6	90.6	86.0	76.7	112.8	107.8	104.5	96.2	94.4	89.4
Wholesale-retail spread 5/ (cets)	60.9	51.8	60.9	67.5	64.3	82.7	81.8	79.1	70.5	66.7	63.3
Farm-wholesale spread 6/ (cets)	32.4	32.7	29.7	28.5	22.4	29.7	26.0	25.4	26.7	27.7	26.1
Farm value/retail price (%)	48	48	44	46	54	40	42	42	46	48	52

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from \$15. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 734, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1830.

Table 9.—Price Indexes of Food Marketing Costs

	Annual			1986				1987	
	1984	1985	1986	I	II	III	IV	I	II P
	1967=100								
Labor-hourly earnings and benefits	365.5	363.0	359.8	362.7	361.3	356.0	359.1	366.5	366.6
Processing	350.2	357.8	365.8	364.3	369.6	362.3	366.8	375.3	376.2
Wholesaling	371.1	382.7	373.0	373.4	370.7	371.5	376.6	392.1	391.6
Retailing	378.3	364.1	348.0	356.4	349.0	342.7	343.7	346.5	346.0
Packaging & containers	307.6	312.1	317.4	314.2	316.3	319.3	320.6	325.1	329.0
Paperboard boxes & containers	281.1	271.6	269.1	266.0	266.4	270.1	273.7	281.5	285.6
Metal cans	397.3	416.9	430.1	429.8	430.2	430.2	430.2	431.3	433.8
Paper bags & related products	280.9	294.7	307.9	298.8	307.2	308.8	316.7	322.5	328.5
Plastic films & bottles	272.1	274.4	274.8	274.5	274.8	275.1	274.7	277.8	278.3
Glass containers	360.8	380.0	388.0	391.1	398.1	401.9	400.5	402.5	400.6
Metal foil	226.8	213.8	208.3	208.9	208.9	209.1	210.3	210.2	213.1
Transportation services	390.8	393.9	391.7	393.9	393.9	392.2	386.4	384.1	385.3
Advertising	300.5	320.2	339.7	333.3	338.4	341.6	345.6	354.9	358.8
Fuel & power	712.5	700.0	590.2	642.5	586.0	569.8	562.5	581.7	588.8
Electric	440.0	453.5	457.8	458.2	457.5	466.8	448.7	441.0	443.9
Petroleum	880.4	821.5	498.8	660.3	477.9	414.8	446.2	520.5	541.3
Natural gas	1,162.9	1,158.2	1,096.9	1,107.4	1,111.8	1,106.1	1,062.1	1,061.2	1,057.3
Communications, water & sewage	215.5	224.9	236.1	231.4	235.9	238.8	238.3	236.9	237.7
Rent	261.6	268.3	273.8	273.7	275.3	275.3	275.9	276.2	275.4
Maintenance & repair	350.3	360.3	368.5	367.2	364.2	369.1	373.5	377.5	379.3
Business services	306.1	321.9	334.1	330.4	333.3	335.8	338.5	341.8	345.1
Supplies	288.5	287.8	282.8	287.4	282.3	280.6	281.0	283.7	286.3
Property taxes & insurance	343.7	362.0	382.3	375.3	380.7	384.2	389.0	392.6	397.3
Interest, short-term	198.8	157.2	125.1	145.1	128.0	115.3	112.1	116.4	134.0
Total marketing cost index	357.0	358.6	355.0	357.9	355.3	352.7	354.3	359.9	361.6

\* Indexes measure changes in employee earnings and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Note: Annual historical data on food marketing cost indexes may be found in Food Consumption, Prices, and Expenditures, Statistical Bulletin 713, ERS, USDA.

Information contact: Denis Dunham (202) 786-1870.

# Livestock and Products

Table 10.—U.S. Meat Supply & Use

Item	Sag. stocks	Pro- duc- tion 1/	Im- ports	Total supply	Ex- ports	Ship- ments	Mili- tary con- sump- tion	Ending stocks	Civilian consumption		Primary market price 3/
									Total	Per capita 2/	
									Pounds		
Million pounds 4/											
Beef:											
1984	325	23,598	1,823	25,746	329	47	112	358	24,900	78.5	65.34
1985	358	23,728	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,371	2,129	26,817	521	52	110	311	25,823	78.8	57.75
1987 F	311	23,375	2,165	25,851	550	60	110	325	24,806	75.9	63-65
Pork:											
1984	301	14,812	954	16,067	164	147	86	274	15,396	61.8	48.86
1985	274	14,807	1,128	16,208	128	131	70	229	15,651	62.1	44.77
1986	229	14,063	1,122	15,414	86	132	73	197	14,927	58.6	51.19
1987 F	197	14,305	1,100	15,602	100	140	80	225	15,057	58.6	50-52
Veal:											
1984	8	495	24	528	6	1	4	14	503	1.8	60.24
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	524	27	562	5	1	6	7	543	1.9	60.89
1987 F	7	450	25	482	5	1	7	7	462	1.6	73-75
Lamb and mutton:											
1984	11	379	20	410	2	3	0	7	398	1.5	62.18
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	338	41	392	1	2	0	12	376	1.4	69.46
1987 F	12	314	45	371	2	1	0	8	360	1.3	79-81
Total red meat:											
1984	646	39,284	2,821	42,751	501	198	202	653	41,197	143.6	NA
1985	653	39,408	3,255	43,316	468	185	192	570	41,908	144.5	NA
1986	570	39,296	3,319	43,185	613	187	189	527	41,670	141.7	NA
1987 F	527	38,444	3,335	42,306	657	202	197	565	40,685	137.4	NA
Broilers:											
1984	21	13,016	0	13,038	407	145	34	20	12,432	52.9	55.6
1985	20	13,762	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,316	0	14,342	566	149	35	24	13,568	56.7	56.9
1987 F	24	15,514	0	15,538	750	144	35	25	14,584	60.3	46-48
Mature chickens:											
1984	92	672	0	763	26	2	2	119	614	2.6	NA
1985	119	636	0	755	21	1	2	144	587	2.5	NA
1986	144	629	0	773	16	3	2	163	589	2.5	NA
1987 F	163	649	0	812	25	4	3	130	651	2.7	NA
Turkeys:											
1984	162	2,685	0	2,847	27	7	13	125	2,676	11.4	74.4
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,271	0	3,422	27	4	10	178	3,202	13.4	72.2
1987 F	178	3,830	0	4,008	30	3	16	300	3,659	15.1	56-58
Total poultry:											
1984	275	16,373	0	16,648	460	153	49	264	15,722	66.9	NA
1985	264	17,340	0	17,604	465	151	49	321	16,619	70.1	NA
1986	321	18,216	0	18,537	608	156	47	365	17,359	72.5	NA
1987 F	365	19,994	0	20,359	805	151	54	455	18,894	78.2	NA
Red meat & poultry:											
1984	921	55,657	2,821	59,398	961	351	251	917	56,919	210.5	NA
1985	917	56,748	3,255	60,820	926	336	241	891	58,526	214.6	NA
1986	891	57,512	3,319	61,722	1,222	343	236	892	59,029	214.3	NA
1987 F	892	58,438	3,335	62,664	1,462	353	251	1,020	59,579	215.6	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry.  
NA = not available, F = forecast.

Information contact: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1830.



Table 11.—U.S. Egg Supply &amp; Use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Ship-ments	Milli-tery use	Hatch-ing use	Ending stocks	Civilian consumption		Wholesale price <sup>a</sup>		
										Total	Per capita			
													No	Cts/doz
1982	17.5	5,801.8	2.5	5,821.8	158.2	25.7	22.4	505.6	20.3	5,088.6	265.1	70.1		
1983	20.3	5,658.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2		
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9		
1985	11.1	5,688.4	12.7	5,712.2	70.6	30.3	20.2	548.1	10.7	5,032.2	254.7	66.4		
1986	10.7	5,715.0	13.7	5,739.4	101.6	28.0	17.8	565.9	10.4	5,016.1	251.5	71.1		
1987 F	10.4	5,770.5	10.6	5,791.5	104.6	24.3	19.5	582.5	10.0	5,040.6	250.3	61-63		

<sup>a</sup> Cartoned Grade A large eggs in New York. F = forecast.

Information contact: Mark Weiner (202) 786-1830.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

Calendar year	Pro-duction	Farm use	Commercial			Total commercial supply	CCC net re-movals	Commercial		All milk price 2/
			Farm market-ings	Beg. stocks	Im-ports			Ending stocks	Disap-pearance	
Billion pounds										\$/cwt
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986 P	144.1	2.6	141.5	4.6	2.7	149.1	10.6	4.2	134.0	12.51
1987 F	142.0	2.6	139.4	4.2	2.7	146.3	5.0	4.4	136.9	12.60

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. P = preliminary F = forecast.

Information contact: Jim Miller (202) 786-1830.

Table 13.—Poultry &amp; Eggs

	Annual			1986		1987					
	1984	1985	1986	June	Jan	Feb	Mar	Apr	May	June	
<b>Broilers</b>											
Federally inspected slaughter, certified (mil lb)	12,998.6	13,569.2	14,265.6	1,194.5	1,276.1	1,157.8	1,277.1	1,259.8	1,254.7	1,351.3	
Wholesale price, 12-city, (cts/lb)	55.6	50.8	56.9	58.3	51.8	49.8	48.5	48.6	50.5	45.3	
Price of grower feed (\$/ton)	233	197	NA	191	173	172	176	185	182	184	
Broiler-feed price ratio 1/	2.8	3.1	NA	3.7	3.6	3.5	3.3	3.2	3.3	3.0	
Stocks beginning of period (mil lb)	21.2	19.7	26.6	23.7	23.9	27.2	23.1	25.5	26.8	26.9	
Broiler-type chicks hatched (mil) 2/	4,593.9	4,803.8	5,013.3	428.7	439.6	406.1	457.2	454.3	471.2	458.3	
<b>Turkeys</b>											
Federally inspected slaughter, certified (mil lb)	2,574	2,800	3,133	275.8	215.4	211.9	241.0	256.8	274.0	333.2	
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	74.4	75.5	72.2	73.8	55.3	58.5	60.3	58.3	55.3	55.7	
Price of turkey grower feed (\$/ton)	245	212	NA	213	212	208	209	209	212	209	
Turkey-feed price ratio 1/	3.8	4.4	NA	4.3	3.3	3.4	3.6	3.5	3.3	3.3	
Stocks beginning of period (mil lb)	161.8	125.3	150.2	229.5	178.2	198.3	211.4	226.6	250.9	301.4	
Poults placed in U.S. (mil)	190.0	197.8	225.4	23.4	21.1	22.6	25.2	26.1	26.6	27.0	
<b>Eggs</b>											
Farm production (mil)	68,498	68,261	68,578	5,604	5,920	5,350	6,040	5,800	5,830	5,570	
Average number of layers (mil) 3/	278	277	278	227	237	236	236	233	231	229	
Rate of lay (eggs per layer on farms)	245	247	247	20.6	20.9	18.9	21.4	20.8	21.1	20.3	
Cartoned price, New York, grade A large (cts/doz) 4/	80.9	66.4	71.1	59.2	67.1	65.2	62.0	62.4	55.6	58.7	
Price of laying feed (\$/ton)	206	182	NA	178	165	164	165	166	167	167	
Egg-feed price ratio 1/	6.8	6.3	NA	5.7	7.2	7.1	6.6	6.7	6.0	6.1	
<b>Stocks, first of month</b>											
Shell (mil doz)	.39	.93	.72	1.32	.66	.60	.75	.96	.84	1.14	
Frozen (mil doz)	8.9	10.2	10.0	8.8	9.8	10.9	10.2	11.0	11.1	13.2	
Replacement chicks hatched (mil)	459	407	425	37.3	34.2	35.2	42.3	42.1	41.4	38.0	

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. NA = not available.

Information contact: Mark Weiner (202) 786-1830.

Table 14.—Dairy

	Annual			1986	1987					
	1984	1985	1986	June	Jan	Feb	Mar	Apr	May	June
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.29	11.45	11.30	11.00	11.70	11.27	11.03	11.00	11.00	11.07
Wholesale prices										
Butter, Grade A Chd. (cts/lb)	145.8	141.1	144.5	139.1	137.3	136.7	137.8	138.8	138.4	144.6
Am. cheese, Wfs. assembly pt. (cts/lb)	138.0	127.7	127.3	125.4	127.7	122.5	122.2	122.4	122.0	122.0
Nonfat dry milk. (cts/lb) 2/	90.9	84.0	80.6	80.4	82.0	79.0	78.9	79.0	79.1	79.2
USDA net removals										
Total milk equiv. (mil lb) 3/	8,637.0	13,174.1	10,628.1	1,105.6	1,201.3	862.8	646.5	598.8	519.4	384.5
Butter (mil lb)	202.3	334.2	287.6	20.5	45.1	31.1	16.9	13.6	14.0	4.0
Am. cheese (mil lb)	447.3	629.0	468.4	68.6	26.7	21.8	29.9	32.0	23.2	30.1
Nonfat dry milk (mil lb)	678.4	940.6	827.3	108.6	49.9	41.2	57.7	61.0	56.8	67.2
Milk										
Milk prod. 21 states (mil lb)	114,545	121,043	122,185	10,648	9,932	9,279	10,376	10,378	10,957	10,491
Milk per cow (lb)	12,691	13,160	13,445	1,170	1,123	1,052	1,180	1,182	1,249	1,196
Number of milk cows (thou)	9,026	9,198	9,088	9,098	8,845	8,818	8,782	8,780	8,772	8,771
U.S. milk production (mil lb)	135,450	143,147	144,080	6/12,541	6/11,683	6/10,933	6/12,261	6/12,218	6/12,841	6/12,282
Stock, beginning										
Total (mil lb)	22,646	16,704	13,685	17,419	12,867	12,939	13,071	13,319	13,101	13,310
Commercial (mil lb)	5,234	4,937	4,590	5,141	4,165	4,480	4,363	4,446	4,813	5,161
Government (mil lb)	17,412	11,767	9,105	12,278	8,702	8,459	8,709	8,873	8,288	8,148
Imports, total (mil lb) 3/	2,741	2,777	2,733	207	200	151	195	167	145	NA
Commercial disappearance										
milk equiv. (mil lb)	126,912	130,640	134,048	11,281	10,150	10,141	11,512	11,209	11,902	NA
Butter										
Production (mil lb)	1,103.3	1,247.8	1,202.4	83.0	108.2	97.8	107.6	104.2	101.7	83.1
Stocks, beginning (mil lb)	499.4	286.5	205.5	330.8	193.0	202.6	231.6	254.0	247.9	250.2
Commercial disappearance (mil lb)	902.7	918.2	922.9	75.2	59.0	72.1	91.5	86.3	79.3	NA
American Cheese										
Production (mil lb)	2,648.5	2,855.2	2,798.2	262.0	219.5	211.2	238.7	246.0	264.3	246.1
Stocks, beginning (mil lb)	1,161.5	960.5	850.2	902.6	697.1	674.2	635.3	614.8	603.5	624.4
Commercial disappearance (mil lb)	2,253.6	2,278.1	2,382.8	187.2	177.9	189.4	200.4	190.1	228.8	NA
Other cheese										
Production (mil lb)	2,025.5	2,225.7	2,411.0	185.4	194.0	189.7	217.2	212.4	220.4	217.7
Stocks, beginning (mil lb)	104.9	101.4	84.1	84.8	92.0	93.5	88.1	89.4	91.8	97.1
Commercial disappearance (mil lb)	2,310.9	2,515.7	2,684.9	213.9	206.1	209.9	237.1	225.4	231.2	NA
Nonfat dry milk										
Production (mil lb)	1,160.7	1,390.0	1,284.1	133.7	82.1	80.3	87.8	101.4	118.6	104.8
Stocks, beginning (mil lb)	1,405.2	1,247.6	1,011.1	1,024.4	686.8	596.6	559.7	512.9	460.8	485.5
Commercial disappearance (mil lb)	497.8	435.0	479.1	25.3	34.8	28.4	36.2	35.8	38.3	NA
Frozen dessert										
Production (mil gal) 4/	1,241.8	1,251.0	1,248.6	127.8	79.8	90.0	107.5	113.0	118.8	134.6
	Annual			1985	1986				1987	
	1984	1985	1986	IV	I	II	III	IV	I	II P
Milk production (mil lb)	135,450	143,147	144,080	35,424	36,172	38,350	35,610	33,947	34,877	37,341
Milk per cow (lb)	12,506	12,894	13,293	3,174	3,251	3,505	3,327	3,208	3,328	3,583
No. of milk cows (thou)	10,833	11,016	10,839	11,162	11,126	10,943	10,703	10,583	10,481	10,422
Milk-feed price ratio 5/	1.59	1.72	1.73	1.76	1.73	1.64	1.72	1.91	1.88	1.76
Returns over concentrate 5/ costs (\$/cwt milk)	9.52	9.54	9.23	9.61	9.40	8.55	8.97	10.10	9.82	8.99

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process. 3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. P = preliminary. NA = not available. Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1986	1987					
	1984	1985	1986	June	Jan	Feb	Mar	Apr	May	June
U.S. wool price, Boston 1/ (cts/lb)	229	192	191	198	193	202	216	260	270	270
Imported wool price, Boston 2/ (cts/lb)	241	197	201	203	214	212	234	248	250	250
U.S. mill consumption, scoured										
Apparel wool (thou lb)	129,982	106,051	126,768	10,780	10,618	11,736	14,426	11,608	11,328	13,558
Carpet wool (thou lb)	13,088	10,562	9,960	603	709	811	1,308	1,209	1,190	934

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1986						
	1984	1985	1986 <sup>1</sup>	June	Jan	Feb	Mar	Apr	May	June
<b>Cattle on feed (7-States)</b>										
Number on feed (thou head) 1/	8,006	8,635	7,820	7,086	7,633	7,284	7,143	7,222	7,233	7,520
Placed on feed (thou head)	20,772	19,346	20,005	1,162	1,591	1,427	1,754	1,726	1,954	1,462
Marketings (thou head)	18,785	18,988	19,243	1,648	1,803	1,473	1,586	1,581	1,524	1,702
Other disappearance (thou head)	1,376	1,132	1,049	67	127	105	89	134	143	87
Beef steer-corn price ratio,										
Omaha 2/	21.6	23.3	31.0	22.3	40.5	44.0	41.6	42.4	40.1	38.8
Hog-corn price ratio, Omaha 2/	16.1	17.8	27.8	22.4	32.7	35.1	32.6	32.7	31.6	34.3
<b>Market prices (\$ per cwt)</b>										
<b>Slaughter cattle:</b>										
Choice steers, Omaha	65.34	58.37	57.75	54.08	58.78	61.02	61.58	66.30	70.66	68.83
Utility cows, Omaha	39.81	38.32	37.18	38.77	39.79	42.29	45.01	44.23	44.36	44.72
Choice vealers, S. St. Paul	63.85	58.28	59.92	61.10	65.94	68.28	70.00	75.00	90.00	90.63
<b>Feeder cattle:</b>										
Choice, Kansas City, 600-700 lb.	65.28	64.56	62.78	58.50	69.00	71.38	71.13	72.90	73.38	74.00
<b>Slaughter hogs:</b>										
Barrows & gilts, 7-markets	48.86	44.77	51.18	54.50	47.39	48.73	48.22	51.85	55.58	61.08
<b>Feeder pigs:</b>										
S. Mo. 40-50 lb. (per head)	39.12	37.20	45.62	41.82	47.00	53.96	54.98	56.00	51.66	45.89
<b>Slaughter sheep &amp; lambs:</b>										
Lambs, Choice, San Angelo	62.18	68.61	69.46	77.36	78.56	75.75	79.83	83.12	94.50	83.33
Ewes, Good, San Angelo	20.90	34.02	34.78	35.88	39.81	41.25	34.88	39.05	36.25	34.62
<b>Feeder lambs:</b>										
Choice, San Angelo	61.02	85.81	73.14	84.69	95.88	99.50	108.50	109.40	112.62	94.56
<b>Wholesale meat prices, Midwest</b>										
Choice steer beef, 600-700 lb.	98.01	90.76	88.98	83.58	89.70	91.69	92.86	100.56	107.80	105.71
Canner & Cutter cow beef	74.70	74.13	71.31	73.41	77.92	80.89	84.58	82.19	82.05	84.15
Pork loins, 8-14 lb. 3/	96.36	91.51	104.78	111.58	98.28	99.40	93.25	102.21	120.77	124.38
Pork bellies, 12-14 lb.	60.08	59.50	65.82	71.83	66.32	57.81	60.02	65.79	67.21	78.44
Hams, skinned, 14-17 lb.	78.22	67.50	80.01	69.69	65.75	65.43	71.97	72.66	70.98	78.91
<b>Commercial slaughter (thou head)*</b>										
<b>Cattle</b>	37,582	36,293	37,292	3,123	3,199	2,662	2,904	2,971	2,872	3,034
Steers	17,474	16,812	17,519	1,519	1,531	1,284	1,413	1,523	1,438	1,527
Heifers	10,691	11,237	11,098	921	1,006	824	892	855	852	901
Cows	8,617	7,391	7,960	621	608	502	541	534	522	547
Bulls & stags	789	758	715	62	55	51	58	59	60	60
Calves	3,297	3,385	3,407	257	263	239	266	228	202	227
<b>Sheep &amp; lambs</b>	6,759	6,165	5,632	420	428	400	442	496	373	421
<b>Hogs</b>	85,168	84,492	78,504	6,076	6,817	6,055	6,966	6,665	6,078	6,158
<b>Commercial production (mil lb)</b>										
Beef	23,418	23,557	24,215	2,027	2,102	1,747	1,907	1,928	1,851	1,958
Veal	479	499	510	41	39	36	38	34	32	35
Lamb & mutton	371	352	330	24	25	24	27	29	22	24
Pork	14,720	14,728	13,983	1,065	1,244	1,070	1,226	1,169	1,070	1,086

	Annual			1986				1987		
	1984	1985	1986	I	II	III	IV	I	II	III
<b>Cattle on feed (13-States)</b>										
Number on feed (thou head) 1/	9,908	10,653	9,754	8,754	8,945	7,970	8,197	8,235	8,797	8,666
Placed on feed (thou head)	24,817	23,366	23,553	9,270	5,221	6,336	6,726	5,700	5,961	---
Marketings (thou head)	22,540	22,887	22,836	5,763	5,821	5,876	5,376	5,767	5,669	5/6,118
Other disappearance (thou head)	1,632	1,398	1,236	316	375	233	312	371	423	---
<b>Hogs &amp; pigs (10-States) 4/</b>										
Inventory (thou head) 1/	42,420	41,100	39,670	41,100	38,210	37,845	38,335	39,870	39,235	41,080
Breeding (thou head) 1/	5,348	5,258	5,050	5,258	4,948	4,840	4,840	5,155	5,230	5,330
Market (thou head) 1/	37,072	35,842	34,620	35,842	33,262	33,005	34,495	34,715	34,005	35,750
Farrowings (thou head)	9,020	8,831	8,208	1,863	2,161	2,034	2,150	1,957	2,337	5/2,217
Pig crop (thou head)	57,680	67,648	63,714	14,254	16,878	15,853	16,729	15,156	18,485	---

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentional. \*Classes estimated.

Information Contact: Ron Gustafson or Leland Southard (202) 786-1830.



Table 17.—Supply & Utilization<sup>1,2</sup>

	Area			Yield	Production	Total supply <sup>4/</sup>	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price <sup>5/</sup>
	Set aside <sup>3/</sup>	Planted	Harvested									
	Mll. acres		Bu/acre									\$/bu
<b>Wheat</b>												
1982/83	5.8	86.2	77.8	35.5	2,765	3,932	195	713	1,508	2,417	1,515	3.45
1983/84	30.0	76.4	81.4	39.4	2,420	3,939	369	742	1,428	2,540	1,399	3.51
1984/85	18.6	79.2	66.9	38.8	2,595	4,003	405	748	1,424	2,578	1,425	3.38
1985/86*	18.8	75.6	64.7	37.8	2,425	3,866	275	771	818	1,960	1,805	3.08
1986/87*	18.5	72.0	60.7	34.4	2,087	4,013	386	808	1,004	2,198	1,815	2.42
1987/88*	23.7	65.2	55.4	38.4	2,125	3,855	175	830	1,228	2,230	1,725	2.30-2.60
<b>Rice</b>												
	Mll. acres		lb/acre					Mll. cut (rough equiv.)				\$/cut
1982/83	0.42	3.30	3.26	4,710	183.8	203.4	--	8/82.9	68.8	131.8	71.5	7.91
1983/84	1.74	2.19	2.17	4,588	88.7	171.8	--	8/84.7	70.3	125.0	46.9	8.57
1984/85	.79	2.83	2.80	4,854	138.8	187.3	--	8/80.8	62.1	122.6	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	134.5	201.8	--	8/85.8	58.7	124.5	77.3	6.53
1986/87*	1.26	2.40	2.38	6,648	134.4	214.1	--	8/76.0	80.0	156.0	88.1	3.80
1987/88*	1.38	2.34	2.33	6,496	127.8	188.3	--	8/80.8	82.0	162.5	25.8	3.60-4.40
<b>Corn</b>												
	Mll. acres		Bu/acre					Mll. bu				\$/bu
1982/83	2.1	81.8	72.7	113.2	8,235	10,772	4,521	884	1,834	7,249	3,523	2.55
1983/84	32.2	60.2	81.8	81.1	4,178	7,700	3,818	875	1,901	6,694	1,006	3.21
1984/85	3.8	80.5	71.8	108.7	7,874	8,684	4,079	1,081	1,865	7,036	1,648	2.63
1985/86*	5.4	83.4	75.2	118.0	8,977	10,538	4,085	1,160	1,241	6,496	4,040	2.23
1986/87*	13.6	76.7	69.2	118.3	8,293	12,284	4,650	1,181	1,528	7,366	4,929	1.51
1987/88*	21.1	66.0	59.6	121.4	7,231	12,162	4,700	1,200	1,600	7,500	4,662	1.60-2.00
<b>Sorghum</b>												
	Mll. acres		Bu/acre					Mll. bu				\$/bu
1982/83	0.7	16.0	14.1	58.1	835	1,184	485	10	210	715	439	2.47
1983/84	5.7	11.8	10.0	48.7	488	827	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	865	1,154	539	18	287	854	300	2.32
1985/86*	.8	18.3	16.8	66.8	1,120	1,420	664	28	178	868	551	1.93
1986/87*	2.3	15.3	13.8	67.7	942	1,482	828	15	200	740	753	1.40
1987/88*	3.8	11.8	10.8	72.1	758	1,511	825	30	225	780	731	1.50-1.85
<b>Barley</b>												
	Mll. acres		Bu/acre					Mll. bu				\$/bu
1982/83	0.4	9.5	9.0	57.2	518	878	241	170	47	458	217	2.18
1983/84	1.1	10.4	8.7	52.3	508	733	282	170	82	544	188	2.47
1984/85	.5	12.0	11.2	53.4	588	799	304	170	77	551	247	2.29
1985/86*	.7	13.2	11.6	81.0	891	848	333	168	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	610	942	295	174	137	606	336	1.61
1987/88*	2.9	11.0	10.1	51.2	518	860	300	175	128	600	260	1.50-1.70
<b>Oats</b>												
	Mll. acres		Bu/acre					Mll. bu				\$/bu
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	528	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	688	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	0.4	14.7	8.8	56.0	385	602	393	85	3	469	133	1.21
1987/88*	0.8	18.0	7.3	53.9	393	561	365	80	2	447	114	1.25-1.65
<b>Soybeans</b>												
	Mll. acres		Bu/acre					Mll. bu				\$/bu
1982/83	0	70.8	69.4	31.5	2,190	2,444	7/86	1,108	905	2,099	345	8.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/78	883	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	588	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,099	2,418	7/86	1,053	740	1,879	536	5.05
1986/87*	0	61.5	59.4	33.8	2,007	2,543	7/118	1,180	740	2,038	505	4.80
1987/88*	0	58.7	57.6	34.7	2,000	2,605	7/80	1,200	670	1,960	545	4.70-5.00
<b>Soybean oil</b>												
								Mll. lbs				\$/cwt
1982/83	--	--	--	--	12,041	13,144	--	8,858	2,025	11,883	11,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	8,588	1,824	11,412	721	30.6
1984/85	--	--	--	--	11,468	12,208	--	8,917	1,660	11,577	632	29.5
1985/86*	--	--	--	--	11,817	12,287	--	10,053	1,257	11,310	847	18.0
1986/87*	--	--	--	--	12,853	13,800	--	10,780	1,100	11,850	1,950	15.3
1987/88*	--	--	--	--	13,000	14,950	--	11,150	1,400	12,550	2,400	12.0-16.0
<b>Soybean meal</b>												
								Thou. tons				\$/ton
1982/83	--	--	--	--	26,714	26,888	--	19,306	7,109	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,528	24,784	--	19,480	4,817	24,397	387	125
1985/86*	--	--	--	--	24,851	25,338	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,878	28,080	--	20,400	7,400	27,800	290	160
1987/88*	--	--	--	--	28,650	28,650	--	21,100	7,250	28,350	300	150-175

See footnotes at end of table.

Table 17.— Supply &amp; Utilization, continued.

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Sell side 3/	Planted	Harvested									
	Mill. acres		lb/acre									
Cotton 10/												
1982/83	1.6	11.3	8.7	580	12.0	18.8	--	5.5	5.2	10.7	7.8	59.8
1983/84	2.8	7.8	7.3	808	7.8	15.7	--	5.8	6.8	12.7	2.8	65.3
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.7
1985/86*	3.5	10.7	10.2	630	13.4	17.4	--	6.4	2.0	8.4	9.4	56.5
1986/87*	3.3	10.0	8.8	552	8.7	19.1	--	7.4	6.7	14.1	5.1	52.2
1987/88*	3.1	10.4	10.1	616	12.8	16.0	--	7.3	7.0	14.3	3.8	--

\*August 11, 1987 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soybean, and soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 58.8944 bushels of oats, 22.046 cwt. of rice, and 8.58 480-pound bales of cotton. 3/ Includes diversion, PIR, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1985		1987				
	1982/83	1983/84	1984/85	1985/86	June	Feb	Mar	Apr	May	June	
Wholesale prices											
Wheat, No. 1 HRW.											
Kansas City (\$/bu) 2/	3.94	3.84	3.74	3.28	2.80	2.80	2.90	2.90	3.02	2.70	
Wheat, DNS.											
Minneapolis (\$/bu) 2/	3.95	4.21	3.70	3.25	2.51	2.65	2.61	2.60	2.76	2.66	
Rice, S.W. La. (\$/cwt) 3/	18.00	19.38	17.98	16.11	10.50	9.96	9.93	10.38	10.38	10.38	
Wheat											
Exports (mil bu)	1,509	1,429	1,424	815	86	76	74	73	72	NA	
Mill grind (mil bu)	656	694	676	707	59	62	64	64	68	NA	
Wheat flour production (mil cwt)	292	308	301	317	27	28	29	28	30	NA	
Rice											
Exports (mil cwt, rough equiv)	68.9	70.3	62.1	58.7	6.5	4.3	5.4	6.4	7.2	NA	
	Marketing year 1/				1985		1986			1987	
	1983/84	1984/85	1985/86	Oct-Dec	Jan-Mar	Apr-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	
Wheat											
Stocks, beginning (mil bu)	1,515	1,399	1,425	2,871.1	2,526.1	2,130.0	1,905.0	3,154.6	2,671.5	2,249.8	
Domestic use:											
Food (mil bu)	643	651	678	176.8	166.8	110.7	174.1	192.2	177.2	180.2	
Feed & seed (mil bu) 4/	469	502	371	24.8	4.9	1.8	346.8	31.1	47.6	44.8	
Exports (mil bu)	1,429	1,424	815	247.3	226.1	115.3	320.6	263.4	202.7	216.8	

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Allen Schienbein and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1986		1987				
	1982/83	1983/84	1984/85	1985/86	June	Feb	Mar	Apr	May	June	
U.S. price, SLM,											
1-1/16 in. (cts/lb) 2/	63.1	73.1	60.5	60.0	65.2	54.8	54.6	57.7	65.9	70.4	
Northern Europe prices:											
Index (cts/lb) 3/	76.7	87.6	69.2	48.9	41.0	65.9	63.0	66.2	76.6	79.3	
U.S. M 1-3/32" (cts/lb) 4/	78.0	87.1	73.9	64.8	41.3	64.8	62.5	65.2	75.1	76.2	
U.S. mill consumption (thou bales)	5,512.8	5,927.0	5,544.5	6,398.9	538.0	587.0	676.0	661.0	641.0	750.4	
Exports (thou bales)	5,206.8	6,786.0	6,201.3	1,969.2	69.0	530.7	633.4	564.0	539.0	NA	
Stocks, beginning (thou bales)	6,632	7,937	2,775	4,102	10,313	12,728	11,807	10,498	9,273	8,093	

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook "A" index: average of five lowest priced of 10 selected growths. 4/ Memphis territory growths. NA = not available.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains.

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	June	Feb	Mar	Apr	May	June
Wholesale prices										
Corn, No. 2 yellow, Chicago (\$/bu)	2.88	3.46	2.72	2.35	2.52	1.50	1.60	1.69	1.99	1.88
Sorghum, No. 2 yellow, Kansas City (\$/cut)	4.80	5.22	4.46	3.72	4.00	2.57	2.80	2.85	3.10	3.20
Barley, feed, Minneapolis (\$/bu)	1.76	2.48	2.09	1.53	1.23	--	3/1.64	1.76	1.86	1.72
Barley, malting, Minneapolis (\$/bu)	2.53	2.84	2.55	2.24	1.84	1.92	2.01	2.05	2.12	2.07
Exports										
Corn (mil bu)	1,834	1,902	1,865	1,241	57	99	145	185	171	121
Feed grains (mil metric tons) 2/	53.0	56.5	56.6	36.6	1.8	3.4	4.7	5.4	4.9	3.4

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May
Corn										
Stocks, beginning (mil bu)	2,537	3,523	1,006	1,648	8,615	6,587	4,990	4,040	10,304	8,248
Domestic use:										
Feed (mil bu)	4,521	3,818	4,079	4,095	1,300	1,086	494	1,388	1,472	1,089
Food, seed, ind. (mil bu)	895	975	1,091	1,160	264	308	308	280	270	325
Exports (mil bu)	1,834	1,902	1,865	1,241	465	204	154	321	315	502
Total use (mil bu)	7,246	6,694	7,036	6,496	2,029	1,599	956	1,989	2,058	1,917

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Aggregated data for corn, sorghum, oats, and barley. 3/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. NA = not available.

Information contacts: Larry Van Meir (202) 786-1840.

Table 21.—Fats &amp; Oils

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	May	Jan	Feb	Mar	Apr	May
Soybeans										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	6.11	7.78	5.88	5.20	5.34	4.90	4.84	4.86	5.10	5.46
Crushings (mil bu)	1,107.8	982.7	1,030.5	1,052.8	86.3	110.3	102.3	106.0	95.9	95.3
Exports (mil bu)	905.2	742.8	898.2	740.0	57.2	71.3	73.8	67.8	53.9	37.6
Stocks, beginning (mil bu)	254.5	344.6	175.7	316.0	67.6	117.2	113.1	105.4	90.2	85.2
Soybean oil										
Wholesale price, crude, Decatur (cts/lb)	20.62	30.55	29.52	18.0	17.79	15.60	15.40	15.21	15.31	16.22
Production (mil lb)	12,040.4	10,872.0	11,467.9	11,620.4	953.3	1,185.6	1,109.6	1,149.0	1,047.1	1,037.6
Domestic disp. (mil lb)	9,857.3	9,598.6	9,916.7	10,062.8	761.7	787.0	856.0	761.6	1,027.1	914.5
Exports (mil lb)	2,024.7	1,813.6	1,658.8	1,257.2	50.7	67.9	74.0	52.1	28.2	47.4
Stocks, beginning (mil lb)	1,102.5	1,260.8	720.5	632.5	1,219.3	1,506.5	1,837.3	2,017.0	2,352.3	2,344.1
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	187.19	188.21	125.46	154.90	157.90	146.80	154.40	146.60	159.00	174.90
Production (thou ton)	26,713.6	22,756.2	24,529.3	24,957.8	2,036.7	2,590.1	2,409.9	2,489.1	2,256.4	2,245.6
Domestic disp. (thou ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,676.9	1,926.4	1,513.5	1,538.4	1,583.4	1,740.1
Exports (thou ton)	7,108.7	5,359.7	4,916.5	6,007.0	378.2	592.8	930.1	992.4	654.8	427.8
Stocks, beginning (thou ton)	175.2	474.1	255.4	387.0	300.8	240.3	311.2	277.5	235.8	244.0
Margarine, wholesale price, Chicago, white (cts/lb)	41.1	46.3	55.4	42.1	41.88	39.25	39.75	39.20	39.38	40.13

1/ Beginning September 1 for soybeans; October 1 for soybean meal and oil; calendar year for margarine. 2/ Beginning April 1, 1982. Prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Sicken-ton (202) 786-1691.

Table 22.—Farm programs, price supports, participation &amp; payment rates

(See the June 1987 issue.)

Information contact: Larry Van Meir (202) 786-1840.



Table 23.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P
<b>Citrus</b>												
Production (thou ton)	14,586	14,788	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488	5/11,853
Per capita consumption (lbs) 1/	119.3	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.7	109.8
<b>Non citrus</b>												
Production (thou tons)	12,384	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,188	13,861
Per capita consumption (lbs) 1/	85.8	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.6	95.3
<b>Stocks, ending</b>												
<b>1986</b>												
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Fob shipping point prices												
Apples (\$/carton) 2/	22.86	NA	17.03	13.70	13.63	14.00	10.67	14.00	14.50	15.35	16.63	17.60
Pears (\$/box) 3/	NA	14.67	14.00	15.00	15.10	14.50	16.00	15.63	14.75	14.10	15.28	21.00
Oranges (\$/box) 4/	3.63	4.03	4.34	4.47	5.58	4.24	4.24	4.75	4.79	4.94	4.36	6.22
Grapefruit (\$/box) 4/	6.17	6.76	6.63	6.29	4.19	4.54	4.50	4.55	4.76	5.21	5.26	5.08
<b>1987</b>												
Fresh apples (mil lbs)	25.4	7.8	2,348.5	4,142.7	3,532.2	2,891.7	2,307.2	1,720.2	1,174.0	751.9	386.3	203.8
Fresh pears (mil lbs)	75.0	124.4	325.1	333.2	281.2	214.7	170.9	127.1	92.1	53.7	21.1	1.7
Frozen fruits (mil lbs)	719.6	741.1	740.7	855.6	777.5	720.9	632.3	563.0	497.7	495.6	510.6	615.6
Frozen orange juice (mil lbs)	920.3	855.3	715.4	877.6	824.8	621.2	877.8	1,015.7	937.1	994.8	1,112.6	1,108.7

1/ Revised per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 3/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 4/ U.S. equivalent on-tree returns. 5/ As of August 1, 1987. NA = not available. P = preliminary.

Information contact: Ben Huang (202) 786-1767.

Table 24.—Vegetables

	Calendar years											
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986		
<b>Production</b>												
Total vegetables (1,000 cwt) 1/	402,936	382,165	413,925	381,370	379,123	431,515	403,320	457,382	453,769	445,436		
Fresh (1,000 cwt) 1/ 2/	176,541	182,563	180,859	180,228	184,694	207,824	197,919	217,132	217,932	216,267		
Processed (tons) 3/	11,319,750	9,880,100	11,153,300	9,557,100	8,221,460	11,179,590	10,270,050	12,013,020	11,783,240	11,616,560		
Mushrooms (1,000 lbs)	388,703	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	NA		
Potatoes (1,000 cwt)	355,334	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	354,468		
Sweet potatoes (1,000 cwt)	11,885	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674		
Dry edible beans (1,000 cwt)	16,555	18,935	20,552	26,728	32,751	25,563	15,520	21,070	22,175	22,898		
<b>Shipments</b>												
Fresh (1,000 cwt) 4/	26,825	27,818	17,579	15,174	19,275	15,967	15,766	20,607	18,066	22,286	20,011	23,887
Potatoes (1,000 cwt)	9,882	7,787	8,066	7,907	11,332	9,828	10,836	14,568	10,881	15,668	13,560	12,165
Sweet potatoes (1,000 cwt)	177	160	96	246	428	706	389	279	259	293	298	177

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop, all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop, all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available.

Information contact: Shannon Hamm or Cathy Greene (202) 786-1767.

Table 25.—Other Commodities

	Calendar years									
	1982	1983	1984	1985	1986 F	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June
<b>Sugar</b>										
Production 1/	8,936	5,682	5,880	5,969	6,257	728	685	3,231	2,024	766
Deliveries 1/	9,153	8,812	8,454	8,035	7,810	1,907	2,069	1,991	1,908	2,002
Stocks, ending 1/	3,068	2,570	3,005	3,126	3,227	2,540	1,652	3,227	3,497	2,476
<b>Coffee</b>										
Composite green price N.Y. (cts/lb)	132.00	131.51	142.95	137.46	165.18	190.79	174.92	159.69	115.38	105.91
Imports, green bean equiv. (million lbs) 2/	2,352	2,259	2,411	2,550	2,586	653	635	498	563	792 F
<b>Tobacco</b>										
Prices at auctions 3/										
Flue-cured (dol/lb)	1.81	1.72	1.52	NQ	1.40	NQ	NQ	NQ	NQ	NQ
Burley (dol/lb)	1.88	1.59	1.57	NQ	1.58	1.57	1.52	1.57	NQ	NQ
Domestic consumption 4/										
Cigarettes (bil)	600.4	584.0	584.0	48.0	49.2	48.8	38.1	42.7	53.0	42.2
Large cigars (mil)	3,493	3,226	3,080	257.1	220.9	261.6	223.4	213.4	235.5	212.7

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Texas removals. F = forecast. NQ = no quote.

Information contacts: (sugar) Dave Harvey (202) 786-1769; (coffee) Fred Gray (202) 786-1769; (tobacco) Verner Grise (202) 786-1768.

Table 26.—World Supply &amp; Utilization of Major Crops, Livestock, &amp; Products

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 F	1987/88 F
Million units							
<b>Wheat</b>							
Area (hectares)	238.7	237.7	229.1	231.4	229.3	228.0	221.4
Production (metric ton)	449.5	477.5	489.4	511.5	499.2	529.7	509.3
Exports (metric ton) 1/	101.3	98.7	102.0	107.0	84.6	90.1	95.8
Consumption (metric ton) 2/	443.6	462.2	482.2	495.6	487.6	520.5	511.0
Ending stocks (metric ton) 3/	87.0	102.3	109.5	125.3	136.8	146.1	144.4
<b>Coarse grains</b>							
Area (hectares)	349.8	338.7	335.3	335.5	340.0	336.7	331.1
Production (metric ton)	766.0	784.4	687.0	813.7	845.8	835.8	810.6
Exports (metric ton) 1/	96.6	89.6	83.1	100.7	83.4	85.7	87.2
Consumption (metric ton) 2/	737.7	753.1	761.8	782.8	770.6	804.6	820.6
Ending stocks (metric ton) 3/	120.7	151.8	77.0	107.8	183.0	214.3	204.4
<b>Rice, milled</b>							
Area (hectares)	145.2	141.1	144.3	144.4	144.7	145.1	144.6
Production (metric ton)	280.6	285.7	308.0	319.2	320.4	317.1	313.1
Exports (metric ton) 4/	11.8	11.8	12.6	11.5	12.7	12.0	11.0
Consumption (metric ton) 2/	281.5	290.3	308.7	313.8	316.4	320.6	319.1
Ending stocks (metric ton) 3/	21.3	17.3	17.2	22.3	26.3	22.8	16.8
<b>Total grains</b>							
Area (hectares)	733.8	718.5	708.7	711.3	714.0	708.8	697.1
Production (metric ton)	1,496.1	1,547.6	1,484.4	1,644.4	1,665.4	1,682.6	1,633.0
Exports (metric ton) 1/	209.7	200.2	207.7	219.2	180.7	187.8	194.0
Consumption (metric ton) 2/	1,462.8	1,505.6	1,552.8	1,592.2	1,574.6	1,645.7	1,650.7
Ending stocks (metric ton) 3/	228.0	271.4	203.7	255.4	346.2	383.2	365.6
<b>Oilseeds</b>							
Crush (metric ton)	138.9	143.5	136.7	150.7	153.9	157.3	160.7
Production (metric ton)	169.4	178.2	165.7	191.0	196.0	196.3	202.7
Exports (metric ton)	35.8	35.2	33.0	33.0	34.3	36.6	35.7
Ending stocks (metric ton)	13.5	20.5	15.8	21.3	26.7	25.8	27.7
<b>Meats</b>							
Production (metric ton)	94.5	98.1	92.8	101.8	104.1	107.5	109.6
Exports (metric ton)	28.8	31.6	28.6	32.3	34.2	35.8	36.0
<b>Oils</b>							
Production (metric ton)	41.6	43.4	42.3	46.2	49.3	49.4	50.9
Exports (metric ton)	13.4	14.0	13.7	15.6	16.4	16.4	17.0
<b>Cotton</b>							
Area (hectares)	33.0	31.4	31.0	33.9	31.9	30.2	31.9
Production (bale)	71.2	68.1	67.7	88.1	79.0	69.0	77.2
Exports (bale)	20.2	19.4	19.2	20.5	20.5	24.8	24.0
Consumption (bale)	66.2	68.3	68.7	70.4	77.0	82.9	82.2
Ending stocks (bale)	25.2	25.1	25.1	42.7	45.6	31.3	25.9
	1981	1982	1983	1984	1985	1986 F	1987 F
<b>Red meat</b>							
Production (mil metric tons)	93.6	93.9	96.4	98.1	101.8	102.3	102.4
Consumption (mil metric tons)	92.0	92.2	94.7	96.1	98.6	100.9	100.8
Exports (mil metric tons) 1/	5.7	5.8	5.8	5.9	6.3	6.1	6.4
<b>Poultry</b>							
Production (mil metric tons)	22.5	23.1	23.5	24.2	25.2	26.0	27.4
Consumption (mil metric tons)	22.1	22.7	23.5	24.0	24.9	25.6	26.8
Exports (mil metric tons) 1/	1.5	1.4	1.3	1.2	1.2	1.2	1.3
<b>Dairy</b>							
Milk production (mil metric tons)	389.7	396.8	412.5	413.0	417.9	422.8	423.4

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1982 data correspond with 1981/82, etc. F = forecast.

Information contact: Frederic Surle (202) 786-1693.

# U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1986	1987					
	1984	1985	1986	June	Jan	Feb	Mar	Apr	May	June
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu)	4.17	3.73	3.19	2.82	3.00	3.09	3.17	3.13	3.28	2.99
Corn, f.o.b. vessel, Gulf ports (\$/bu)	3.50	2.89	2.27	2.69	1.77	1.74	1.85	1.93	2.08	2.08
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu)	3.00	2.64	2.16	2.37	1.75	1.75	1.87	1.86	2.01	2.01
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	7.38	5.83	5.45	5.53	5.13	5.08	5.14	5.35	5.71	5.82
Soybean oil, Decatur (cts/lb)	30.75	27.03	16.36	16.75	15.45	15.21	15.03	15.03	15.83	15.57
Soybean meal, Decatur (\$/ton)	166.80	127.15	157.62	158.55	147.65	153.24	146.98	158.48	175.70	187.25
Cotton, 8 market avg. spot (cts/lb)	68.37	58.55	53.47	65.24	57.17	54.75	54.60	57.72	65.94	70.42
Tobacco, avg. price at auction (cts/lb)	170.64	172.05	153.93	158.13	144.90	145.82	146.51	145.59	145.58	145.59
Rice, f.o.b. mill, Houston (\$/cwt)	19.47	18.49	14.60	13.50	11.13	10.50	10.50	10.50	10.50	10.50
Inedible tallow, Chicago (cts/lb)	17.47	14.33	8.03	7.56	10.69	11.00	9.77	12.88	15.13	14.73
Import commodities										
Coffee, N.Y. spot (\$/lb)	1.46	1.42	2.01	1.93	1.27	1.20	1.03	1.02	1.09	1.08
Rubber, N.Y. spot (cts/lb)	49.70	41.91	42.87	41.06	45.93	46.51	46.11	47.39	49.06	50.58
Cocoa beans, N.Y. (\$/lb)	1.06	.99	.88	.81	.86	.85	.87	.90	.90	.87

Information contact: Mary Taymourian (202) 786-1692.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1986					1987						
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
	March 1973=100											
Total U.S. trade 1/ Nominal	108	107	107	108	107	101	99	89	87	96*	98*	99*
	April 1971=100											
Agricultural trade												
Nominal 2/	4,661	4,680	4,733	4,794	4,903	5,238	6,102	6,954	7,783	9,838	12,507	14,245
Real 3/	87	87	89	90	88	86	85*	85*	84*	84*	86*	87*
Soybeans												
Nominal 2/	250	266	280	284	305	314	327	343	358	374	394	412
Real 3/	75	75	75	76	75	72	71*	71*	70*	69*	70*	71*
Wheat												
Nominal 2/	26,501	26,514	26,733	27,020	27,616	28,557	34,601	39,700	44,815	57,302	73,477	83,997
Real 3/	102	102	109	110	107	105	104*	106*	103*	106*	111*	112*
Corn												
Nominal 2/	4,297	4,320	4,369	4,430	4,534	4,842	5,631	6,407	7,158	9,020	11,436	13,013
Real 3/	80	80	80	80	79	76	76*	76*	74*	73*	75*	76*
Cotton												
Nominal 2/	230	233	236	237	237	234	233	233	272	270	269	269
Real 3/	90	91	92	92	92	91	90*	90*	89*	87*	88*	88*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S. dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S. total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. \*Preliminary. Information Contact: Edward Wilson (202) 786-1688.

Table 29.—U.S. Trade Balance

	Fiscal years*									May
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1987
	\$ million									
<b>Exports</b>										
Agricultural	31,979	40,481	43,780	39,095	34,768	38,027	31,201	26,325	27,500	2,179
Nonagricultural	135,839	168,846	185,423	176,310	158,373	170,014	179,236	176,613	NA	17,471
Total 1/	167,818	210,327	229,203	215,405	194,142	208,041	210,437	202,938	NA	19,650
<b>Imports</b>										
Agricultural	16,186	17,276	17,218	15,481	16,271	18,916	19,740	20,875	20,000	1,699
Nonagricultural	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	NA	30,899
Total 2/	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	NA	32,598
<b>Trade balance</b>										
Agricultural	15,793	23,205	26,562	23,614	18,498	19,111	11,461	5,450	7,500	480
Nonagricultural	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-166,242	NA	-13,428
Total	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,792	NA	-12,948

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986.  
1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).  
NA = not available. F = forecast. Information contact: Steve MacDonald (202) 786-1621.



Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal years*					May	Fiscal years*					May
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987		
	Thousand units						\$ million					
Exports												
Animals, live (no) 1/	754	996	570	--	21	276	255	344	--	12		
Meats & preps., excl. poultry (mt)	422	427	451	2/500	44	929	906	1,012	--	119		
Dairy products (mt)	418	423	481	--	41	393	414	430	500	53		
Poultry meats (mt)	225	234	265	400	36	280	257	282	--	36		
Fats, oils, & greases (mt)	1,395	1,217	1,355	3/1,200	87	703	608	477	--	34		
Hides & skins incl. furskins	--	--	--	--	--	1,318	1,325	1,456	--	148		
Cattle hides, whole (no) 1/	24,283	25,456	25,973	--	2,060	1,010	1,019	1,150	--	116		
Mink pelts (no) 1/	2,551	2,237	2,697	--	179	67	60	65	--	8		
Grains & feeds (mt)	108,194	93,203	74,437	--	8,011	17,304	13,285	9,476	4/9,600	780		
Wheat (mt)	41,699	28,523	25,490	30,000	1,758	6,487	4,264	3,259	5/3,300	184		
Wheat flour (mt)	1,071	718	1,137	1,300	135	234	164	204	--	23		
Rice (mt)	2,293	1,972	2,382	2,300	263	897	677	648	600	55		
Feed grains, incl. products (mt)	55,546	55,362	36,293	47,200	4,895	8,217	6,884	3,819	3,700	382		
Feeds & fodders (mt)	7,021	6,533	8,381	6/9,700	912	1,216	1,004	1,289	--	117		
Other grain products (mt)	564	795	754	--	72	243	293	257	--	25		
Fruits, nuts, and preps. (mt)	1,931	1,907	2,003	--	190	1,594	1,687	1,766	--	152		
Fruit juices incl. froz. (hl) 1/	5,598	4,641	3,652	--	452	223	200	148	--	20		
Vegetables & preps. (mt)	1,527	1,420	1,467	--	143	999	946	1,000	--	102		
Tobacco, unmanufactured (mt)	227	257	224	200	15	1,433	1,588	1,318	1,200	92		
Cotton, excl. linters (mt)	1,481	1,277	482	1,500	117	2,395	1,945	678	1,800	128		
Seeds (mt)	252	289	269	--	16	326	352	366	400	15		
Sugar, cane or beet (mt)	285	355	375	--	80	74	65	75	--	15		
Oilseeds & products (mt)	26,961	23,803	27,557	--	1,540	8,602	6,195	6,266	7/5,800	349		
Oilseeds (mt)	20,466	17,886	20,684	8/19,600	1,065	6,254	4,324	4,394	--	226		
Soybeans (mt)	19,265	16,621	20,139	19,100	1,022	5,734	3,876	4,174	3,700	207		
Protein meal (mt)	5,060	4,606	5,588	6,000	395	1,217	853	1,127	1,200	79		
Vegetable oils (mt)	1,435	1,311	1,284	--	80	1,131	1,018	746	--	46		
Essential oils (mt)	11	12	7	--	1	96	105	105	--	9		
Other	465	443	568	--	26	1,082	1,069	1,126	--	115		
Total	143,794	125,967	108,941	127,500	10,357	38,027	31,201	26,325	27,500	2,179		
Imports												
Animals, live (no) 1/	1,907	2,120	1,885	--	125	596	569	637	600	38		
Meats & preps., excl. poultry (mt)	905	1,123	1,139	1,127	101	1,931	2,214	2,248	2,400	221		
Beef & veal (mt)	550	674	693	710	62	1,165	1,295	1,252	1,400	131		
Pork (mt)	328	416	406	430	36	703	847	900	1,000	83		
Dairy products (mt)	382	418	400	410	24	757	763	786	800	55		
Poultry and products 1/	--	--	--	--	--	122	93	101	--	12		
Fats, oils, & greases (mt)	18	21	22	--	2	13	18	17	--	1		
Hides & skins, incl. furskins 1/	--	--	--	--	--	216	240	200	--	27		
Wool, unmanufactured (mt)	59	43	53	--	7	193	145	160	--	24		
Grains & feeds (mt)	1,805	2,070	2,311	2,580	226	534	604	668	700	59		
Fruits, nuts, & preps., excl. juices (mt)	4,036	4,483	4,637	4,850	453	1,634	1,891	1,976	2,000	190		
Bananas & plantains (mt)	2,727	3,022	3,042	3,100	258	666	752	740	700	70		
Fruit juices (hl) 1/	27,247	35,112	31,539	28,000	2,024	671	995	698	600	47		
Vegetables & preps. (mt)	2,093	2,140	2,199	2,200	176	1,314	1,347	1,560	1,700	121		
Tobacco, unmanufactured (mt)	190	181	208	200	23	563	556	605	600	57		
Cotton, unmanufactured (mt)	32	31	41	--	1	17	17	14	--	9/		
Seeds (mt)	82	92	83	90	8	97	91	111	100	11		
Nursery stock & cut flowers 1/	--	--	--	--	--	292	318	353	--	33		
Sugar, cane or beet (mt)	2,829	2,338	1,905	1,500	128	1,144	912	654	--	36		
Oilseeds & products (mt)	1,137	1,271	1,508	1,800	119	799	784	639	600	47		
Oilseeds (mt)	223	253	197	--	18	95	98	69	--	5		
Protein meal (mt)	118	159	138	--	23	21	17	15	--	3		
Vegetable oils (mt)	797	859	1,173	--	77	683	670	555	--	39		
Beverages excl. fruit juices (hl) 1/	14,120	15,494	15,488	--	1,497	1,547	1,622	1,848	--	176		
Coffee, tea, cocoa, spices (mt)	1,776	1,868	1,940	1,730	181	4,777	4,983	6,099	4,900	403		
Coffee, incl. products (mt)	1,128	1,128	1,223	1,050	116	3,300	3,244	4,400	3,200	259		
Cocoa beans & products (mt)	451	539	507	500	47	1,058	1,285	1,189	1,200	100		
Rubber & allied gums (mt)	809	799	801	800	66	854	680	615	600	58		
Other	--	--	--	--	--	844	900	885	--	83		
Total	--	--	--	--	--	18,916	18,740	20,875	20,000	1,699		

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. -- not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-8/ are based on slightly different groups of commodities. Fiscal 1986 exports of categories used in the 1987 forecasts were: 2/ 413 thousand mt. 3/ 1,306 thousand mt. 4/ 9,646 million. 5/ 3,489 million. 6/ includes flour. 7/ 5,439 million. 8/ 20,481 thousand mt. 9/ Less than \$500. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.

Table 31. U.S. Agricultural Exports by Region

Region & Country	Fiscal years*				May	Change from year* earlier				May
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	\$ million					Percent				
Western Europe	9,265	7,183	6,857	6,800	408	-9	-22	-5	-3	-15
European Community (EC-12)	8,650	6,668	6,442	6,400	381	9	-23	-3	-2	-14
Belgium-Luxembourg	836	470	361	--	17	3	-44	-23	--	-49
France	510	396	431	--	35	-1	-22	9	--	25
Germany, Fed. Rep.	1,260	900	1,001	--	67	-13	-29	11	--	11
Italy	771	677	693	--	60	-4	-12	2	--	24
Netherlands	2,227	1,926	2,042	--	107	-21	-14	6	--	-33
United Kingdom	790	628	628	--	39	-4	-20	0	--	-28
Portugal	702	502	308	--	17	10	-28	-39	--	10
Spain, incl. Canary Islands	1,232	832	723	--	25	3	-32	-13	--	-3
Other Western Europe	615	515	415	400	27	-10	-16	-19	0	-26
Switzerland	311	232	128	--	9	-12	-26	-45	--	-36
Eastern Europe	741	532	447	500	28	-10	-28	-16	0	42
German Dem. Rep.	132	81	52	--	1	7	-39	-36	--	44
Poland	197	126	42	--	14	-15	-36	-66	--	208
Yugoslavia	180	137	134	--	8	-28	-24	-2	--	64
Romania	155	88	112	--	0	35	-43	27	--	-107
USSR	2,512	2,525	1,105	800	131	156	1	-56	-45	359
Asia	15,208	11,933	10,498	11,700	988	12	-22	-12	2	34
West Asia (Mideast)	1,865	1,452	1,243	1,600	145	26	-22	-14	8	100
Turkey	222	129	111	--	7	693	-42	-13	--	-19
Iraq	423	371	321	--	60	31	-12	-13	--	222
Israel	351	300	255	--	31	20	-15	-15	--	63
Saudi Arabia	497	381	335	--	32	11	-23	-12	--	110
South Asia	867	589	517	400	15	-26	-31	-14	-2	9
Bangladesh	157	205	94	--	1/	3	31	-54	--	215
India	376	128	90	--	4	-51	-66	-30	--	-50
Pakistan	285	228	285	--	10	33	-20	25	--	89
China	692	239	88	200	22	27	-65	-63	0	1,481
Japan	6,935	5,663	5,139	5,500	450	18	-18	-9	0	16
Southeast Asia	1,218	842	725	800	60	1	-31	-14	14	27
Indonesia	438	204	172	--	15	7	-53	-16	--	-41
Philippines	300	285	270	--	23	-21	-5	-5	--	448
Other East Asia	3,631	3,138	2,787	3,200	297	10	-14	-11	7	38
Taiwan	1,409	1,342	1,108	--	124	14	-5	-17	--	50
Korea, Rep.	1,816	1,400	1,277	--	137	6	-23	-9	--	33
Hong Kong	407	396	399	--	35	18	-3	1	--	16
Africa	2,868	2,527	2,135	1,900	145	26	-12	-16	-5	7
North Africa	1,542	1,207	1,402	1,300	103	6	-22	16	0	30
Morocco	341	156	158	--	24	52	-54	2	--	223
Algeria	162	220	330	--	19	-20	36	50	--	-1
Egypt	882	766	875	--	58	-3	-13	14	--	13
Sub-Saharan	1,327	1,320	733	600	41	62	-1	-44	-14	-26
Nigeria	345	367	158	--	2	4	6	-57	--	-56
Rep. S. Africa	525	189	70	--	4	304	-64	-63	--	91
Latin America & Caribbean	5,279	4,570	3,599	3,800	303	9	-13	-21	8	-5
Brazil	438	557	444	--	21	10	27	-20	--	204
Caribbean Islands	827	771	752	800	67	7	-7	-2	0	-12
Central America	396	361	334	400	33	11	-9	-7	33	16
Colombia	220	238	137	--	8	-14	8	-42	--	-27
Mexico	1,966	1,566	1,115	1,300	87	11	-20	-29	27	-23
Peru	227	106	108	--	5	-12	-53	2	--	18
Venezuela	778	721	493	--	54	26	-7	-32	--	6
Canada	1,936	1,727	1,466	1,700	162	4	-11	-15	7	40
Oceania	216	204	216	200	13	-4	-6	6	0	-40
Total	38,027	31,201	26,325	27,500	2,179	9	-18	-16	-1	17
Developed Countries	19,180	15,225	13,963	14,200	1,064	4	-21	-8	-3	4
Less Developed Countries	14,902	12,680	10,721	11,800	934	7	-15	-15	6	19
Centrally Planned Countries	3,845	3,296	1,640	1,500	181	67	-16	-50	-34	265

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. 1/ Less than \$500,000. F = forecast. -- not available.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1621.

## Table 32.—Farm Income Statistics

	Calendar years										
	1977	1978	1979	1980	1981	1982 R	1983 R	1984 R	1985 R	1986 R	1987 F
	\$ billion										
3. Farm receipts	97.5	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	136 to 138
Crops (incl. net CCC loans)	48.6	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	58 to 60
Livestock	47.6	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	72 to 74
Farm related 1/	1.2	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	4 to 6
2. Direct Government payments	1.8	3.0	1.4	1.3	1.8	3.5	9.3	8.4	7.7	11.8	14 to 16
Cash payments	1.8	3.0	1.4	1.3	1.8	3.5	4.1	4.0	7.6	8.1	7 to 9
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	7 to 9
3. Total gross farm income (4+5+6) 2/	108.8	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	159 to 161
4. Gross cash income (1+2)	99.3	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	151 to 153
5. Nonmoney income 3/	8.4	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	8 to 10
6. Value of inventory change	1.1	1.9	5.0	-6.3	6.5	-1.4	-10.9	6.2	-2.7	-3.3	-3 to 0
7. Cash expenses 4/	71.4	84.2	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	95 to 97
8. Total expenses	88.9	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	116 to 118
9. Net cash income (4-7)	27.8	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	54 to 58
10. Net farm income (3-8)	19.8	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.8	41 to 45
Deflated (1982\$)	29.5	34.8	34.9	18.8	28.6	23.5	12.2	29.7	28.1	32.9	35 to 39
11. Off-farm income	26.1	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	47 to 49
12. Loan charges 5/:											
5/:											
Real estate	7.6	7.6	13.0	9.3	8.4	4.0	2.5	-0.8	-5.6	-7.3	-9 to -5
Nonreal estate	8.8	8.3	10.9	5.8	6.2	3.4	1.0	-0.8	-9.2	-10.5	-10 to -6
14. Rental income plus monetary change	3.5	4.1	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	6 to 8
15. Capital expenditures 5/	15.0	17.9	19.9	18.0	16.8	13.3	12.7	12.5	8.6	8.6	6 to 8
16. Net cash flow (9+12+13+14-15)	30.6	35.1	42.7	37.5	37.9	38.4	33.6	33.6	31.6	33.4	39 to 43

R = revised, F = forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add due to rounding.

Information contact: Richard Kofl (202) 786-1808.

## Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P	1987 F
	\$ billion										
Assets											
Real estate 1/	507.7	600.7	704.2	778.2	780.2	745.6	736.1	639.6	559.6	515	510 to 520
Non-real estate	149.0	183.0	213.9	224.0	325.0	232.2	220.4	216.5	211.9	196	180 to 200
Livestock & poultry	31.9	51.3	61.4	60.6	53.5	53.0	49.7	49.6	45.9	44	47 to 51
Machinery & motor vehicles	68.8	78.2	80.8	96.8	103.0	103.7	100.9	85.0	82.2	89	84 to 88
Crops stored	24.8	28.0	33.6	36.5	36.1	40.6	33.2	33.7	37.1	28	25 to 28
Financial assets	22.4	25.5	28.2	30.1	32.4	34.9	36.5	38.1	36.7	35	34 to 37
Total farm assets	656.7	783.7	918.1	1,003.2	1,005.2	977.8	956.5	856.1	771.4	712	705 to 715
Liabilities											
Real estate	58.0	69.6	78.5	87.8	97.2	101.2	103.7	102.8	87.3	90	81 to 85
Non-real estate	52.4	66.4	76.7	82.5	81.6	102.4	98.7	95.8	84.8	86	70 to 74
CCC loans	4.5	5.7	5.1	5.0	8.0	15.4	10.8	8.6	16.9	19	12 to 14
Other non-real estate	52.4	60.7	71.6	77.5	83.6	87.0	87.9	87.1	77.9	67	58 to 60
Total farm liabilities	114.9	131.9	155.2	170.4	188.8	203.6	202.4	198.7	182.1	176	153 to 158
Total farm equity	541.8	651.8	762.9	832.8	816.4	774.2	754.0	657.3	579.3	536	553 to 558
	Percent										
Selected ratios											
Debt-to-assets	17.5	16.8	16.8	17.0	18.8	20.8	21.2	23.2	24.8	24.7	22
Debt-to-equity	20.0	19.3	19.6	19.7	23.1	26.3	26.8	30.2	33.2	32.9	28
Debt-to-net cash income	412.3	398.2	464.4	497.7	575.7	554.8	545.5	512.0	406.3	338.6	283.1

1/ Excludes farm household. P = preliminary, F = forecast.

Information contact: Richard Kofl (202) 786-1808.



Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1985	1986	Apr	May	1985	1986	Apr	May	1985	1986	Apr	May
			1987	1987			1987	1987			1987	1987
\$ million 2/												
North Atlantic												
Maine	244	241	18	19	138	142	26	26	382	383	44	45
New Hampshire	70	72	6	6	36	38	3	2	107	110	9	9
Vermont	354	361	29	30	34	36	2	2	388	398	31	32
Massachusetts	127	131	11	12	259	282	18	14	385	423	29	26
Rhode Island	14	12	1	1	62	63	6	4	76	75	7	5
Connecticut	204	210	16	16	150	162	15	12	355	372	31	28
New York	1,847	1,811	147	146	727	692	51	41	2,574	2,503	198	188
New Jersey	144	150	12	13	444	430	31	30	589	580	44	43
Pennsylvania	2,184	2,238	181	199	1,008	926	82	65	3,192	3,165	263	263
North Central												
Ohio	1,815	1,565	136	137	2,601	2,044	51	24	4,115	3,609	187	161
Indiana	1,728	1,850	158	175	3,064	2,259	38	36	4,792	4,109	196	211
Illinois	2,052	2,144	216	228	5,816	4,738	-40	82	7,967	6,882	176	309
Michigan	1,231	1,237	101	105	1,701	1,428	55	47	2,933	2,664	156	152
Wisconsin	4,058	4,160	360	378	1,025	894	19	21	5,084	5,054	379	399
Minnesota	3,371	3,395	290	306	3,224	2,679	-24	41	6,595	6,074	265	348
Iowa	4,883	4,980	474	438	4,582	4,124	62	-129	9,465	9,104	536	308
Missouri	1,924	1,825	176	157	1,763	1,586	19	26	3,688	3,511	195	183
North Dakota	687	676	63	53	2,001	1,623	49	59	2,688	2,299	112	112
South Dakota	1,900	1,526	135	126	1,157	938	11	1	3,057	2,464	146	127
Nebraska	4,112	4,260	449	423	3,227	2,669	-30	-28	7,340	6,828	418	394
Kansas	3,264	3,447	329	385	2,552	1,878	11	11	5,816	5,425	339	396
Southern												
Delaware	353	359	34	30	134	111	4	5	487	470	38	35
Maryland	764	814	63	62	458	371	46	21	1,222	1,186	109	83
Virginia	1,062	1,127	92	82	629	488	16	14	1,691	1,615	108	96
West Virginia	191	156	13	13	58	71	2	1	249	227	16	14
North Carolina	1,958	2,179	173	171	1,977	1,604	37	43	3,935	3,783	210	214
South Carolina	415	453	36	36	621	439	10	10	1,036	891	46	46
Georgia	1,726	1,885	150	153	1,571	1,343	48	32	3,287	3,227	195	185
Florida	1,021	1,000	92	85	3,576	3,800	567	594	4,586	4,800	660	679
Kentucky	1,352	1,311	91	78	1,583	1,078	8	11	2,934	2,388	100	89
Tennessee	1,080	1,144	101	109	1,091	891	33	22	2,171	2,035	134	131
Alabama	1,301	1,431	125	118	773	576	23	18	2,074	2,007	148	137
Mississippi	1,011	1,046	88	82	1,239	741	-2	-11	2,249	1,787	85	70
Arkansas	1,825	2,022	167	136	1,606	978	-48	-6	3,432	3,000	118	130
Louisiana	491	503	41	42	993	872	2	11	1,485	1,375	43	53
Oklahoma	1,726	1,835	151	161	957	746	27	46	2,683	2,581	178	207
Texas	5,441	5,537	463	546	3,851	2,939	108	216	9,282	8,475	571	762
Western												
Montana	802	720	53	47	422	493	22	17	1,224	1,213	76	64
Idaho	862	868	80	77	1,220	1,065	52	42	2,082	1,933	132	118
Wyoming	479	455	47	29	123	110	2	2	601	566	49	30
Colorado	2,019	2,219	229	173	1,098	892	41	43	3,117	3,111	270	216
New Mexico	718	708	72	70	371	307	11	17	1,089	1,016	83	87
Arizona	701	699	80	100	793	798	37	82	1,494	1,496	117	182
Utah	413	437	37	31	142	133	7	5	555	570	44	36
Nevada	144	160	14	15	81	72	6	3	225	232	19	18
Washington	926	981	87	77	1,910	1,816	140	118	2,837	2,797	227	195
Oregon	622	647	47	46	1,101	1,137	55	42	1,723	1,784	103	88
California	4,163	4,557	382	378	9,821	10,032	615	831	13,985	14,589	997	1,208
Alaska	8	10	1	1	19	20	1	1	27	30	2	2
Hawaii	83	84	7	7	462	503	41	41	545	587	48	48
United States	69,571	71,734	6,328	6,309	74,353	64,170	2,360	2,654	143,824	135,903	8,688	8,963

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.  
2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual						1986	1987				
	1981	1982	1983	1984	1985	1986	May	Jan	Feb	Mar	Apr	May
	\$ million											
Farm marketings and CCC loans *	141,516	142,802	136,559	142,457	143,924	135,903	9,193	13,069	8,357	8,984	8,688	8,863
Livestock and products	69,151	70,249	69,459	73,049	69,571	71,734	5,877	6,155	5,475	6,055	6,328	6,309
Meat animals	39,748	40,817	38,893	40,832	38,274	39,131	3,212	3,533	3,152	3,549	3,782	3,746
Dairy products	18,095	18,234	18,763	17,944	18,071	17,824	1,575	1,551	1,399	1,538	1,507	1,546
Poultry and eggs	8,848	8,519	10,002	12,305	11,285	12,833	954	827	812	837	902	879
Other	1,358	1,579	1,801	1,968	1,941	1,945	136	144	112	132	136	138
Crops	72,465	72,553	67,099	69,408	74,353	64,170	3,316	6,914	2,883	2,938	2,360	2,654
Food grains	11,619	11,412	9,713	9,576	8,080	5,949	117	417	58	98	20	84
Feed crops	17,770	17,417	18,537	15,833	22,480	17,853	828	2,771	580	61	-180	-95
Cotton (lint and seed)	4,055	4,457	3,705	3,270	3,721	2,820	62	500	137	69	-24	23
Tobacco	3,250	3,342	2,768	2,841	2,722	1,818	0	167	26	10	22	0
Oil-bearing crops	13,853	13,814	13,546	13,894	12,595	10,483	73	1,429	480	671	370	312
Vegetables and melons	8,772	8,186	8,466	9,159	8,561	8,734	1,106	738	560	819	883	1,142
Fruits and tree nuts	6,603	6,844	6,064	6,770	6,743	7,405	394	306	465	432	307	453
Other	6,543	7,083	7,302	8,066	8,451	8,907	736	588	577	778	975	736
Government Payments	1,832	3,482	9,295	8,430	7,704	11,813	1,761	1,318	2,557	2,204	1,724	608
Total	143,348	146,284	145,854	150,887	151,628	147,716	10,954	14,387	10,914	11,198	10,412	9,571

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information Contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1977	1978	1979	1980	1981	1982 R	1983 R	1984 R	1985 R	1986 R
	\$ million 2/									
Feed	13,967	16,036	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179
Livestock	7,072	10,150	13,012	10,670	8,999	9,684	8,814	9,498	9,996	9,609
Seed	2,484	2,638	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984
Farm-origin inputs	23,523	28,824	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772
Fertilizer	6,528	6,619	7,369	9,490	9,409	8,018	7,067	7,429	7,258	5,787
Fuels and oils	4,356	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790
Electricity	1,069	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121
Pesticides	1,938	2,656	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331
Manufactured inputs	13,892	15,273	17,887	22,434	23,927	22,229	20,870	21,505	20,809	17,029
Short-term interest	4,203	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795
Real estate interest	4,329	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131
Total interest charges	8,532	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926
Repair and operation 3/	5,430	6,638	7,280	7,648	7,587	6,428	6,529	6,416	6,370	6,426
Hired labor	7,131	8,279	8,992	9,294	8,932	10,075	9,725	9,728	9,792	9,875
Machine hire and custom work	1,682	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791
Dairy deduction	0	0	0	0	0	0	650	657	163	431
Misc. operating expenses 4/	6,129	7,703	9,047	9,378	9,865	12,367	12,341	12,461	12,072	10,996
Other operating expenses	20,372	24,396	27,732	28,143	28,368	30,899	31,141	31,433	30,581	29,519
Capital consumption	15,493	16,963	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997
Taxes	3,660	3,603	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125
Net rent to non-operator										
landlord	3,412	3,863	6,192	6,075	6,184	6,059	5,060	8,640	8,124	6,684
Other overhead expenses	22,565	24,529	29,398	31,440	36,003	33,576	32,519	32,388	31,596	29,806
Total production expenses	88,884	103,249	123,305	133,139	139,444	139,978	140,375	142,669	133,696	122,052

1/ Includes operator household. 2/ Totals may not add due to rounding. 3/ Beginning in 1982 repairs and maintenance excludes motor vehicle registration fees and insurance. 4/ Beginning in 1982, misc. operating expenses includes other livestock purchases and motor vehicle registration fees and insurance. R = revised.

Information contact: Richard Kold (202) 786-1808.

Table 37.—CCC Net Outlays by Commodity &amp; Function

	Fiscal years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987E	1988E
	\$ million										
Commodity											
Feed grains	2,288	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,388	8,272
Wheat	844	308	879	1,543	2,238	3,418	2,536	4,691	3,440	2,787	2,042
Rice	-66	49	-76	24	164	664	333	990	947	1,020	753
Upland cotton	224	141	64	336	1,190	1,363	244	1,553	2,142	1,619	89
Tobacco	98	157	-88	-51	103	880	346	455	253	-326	-217
Dairy	240	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,238	993
Soybeans	31	4	116	87	169	288	-585	711	1,597	-446	47
Peanuts	-39	27	28	28	12	-6	1	12	32	7	1/
Sugar	395	313	-405	-121	-5	49	10	184	214	-350	--
Honey	3	-2	9	8	27	48	90	81	89	82	66
Wool	33	39	35	42	54	84	132	109	123	149	126
Other	1,608	1,407	-107	780	122	2,710	3,463	1,601	2,455	3,859	4,056
Total	5,656	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	23,127	16,227
Function											
Price support loans	1,377	2	-66	174	7,015	8,438	-27	6,272	13,628	11,549	5,618
Direct payments	2,268	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	6,109	3,876
Purchases	100	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	276
Producer storage payments	216	247	254	32	679	964	268	328	485	578	610
Processing, storage, & transportation	89	128	259	323	355	665	639	657	1,013	1,539	1,634
Operating expense	101	97	157	159	294	328	362	346	457	537	530
Interest expenditure	-106	238	518	220	-13	3,525	1,064	1,435	1,411	1,134	1,055
Export programs	948	417	-669	-940	65	398	743	134	102	459	615
Other	662	662	200	1,436	-265	-1,607	678	-648	329	1,701	2,013
Total	5,656	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	23,127	16,227

E = Estimated in the FY 1988 Mid-Season Review. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). 1/ = less than 500,000.

Information contact: Richard Pazdalski (202) 447-5148

## Transportation

Table 38.—Rail Rates; Grain &amp; Fruit/Vegetable Shipments

	Annual			1986	1987					
	1984	1985	1986 P	June	Jan	Feb	Mar	Apr	May	June
Rail freight rate index 1/ (Dec 1984=100)										
All products	99.3	100.0	100.7	100.9	99.8	99.8	99.7 P	100.1 P	100.0 P	100.2 P
Farm Products	98.7	99.0	99.6	100.3	98.9	98.9	98.7 P	99.3 P	97.9 P	99.5 P
Grain	98.6	98.3	98.9	99.2	98.3	78.3	98.0 P	98.7 P	96.9 P	98.8 P
Food Products	99.1	100.1	99.9	99.6	98.4	98.4	98.4 P	98.6 P	98.7 P	98.8 P
Grain										
Rail carloadings (thou cars) 2/	27.2	22.9	24.3	24.9	23.0	26.7 P	27.3 P	25.3 P	25.7 P	32.7 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	570	602	630	936	527 P	543 P	493 P	678 P	864 P	833 P
Rail (thou cwt) 3/ 4/	640	532	556	732	663 P	518 P	533 P	624 P	810 P	917 P
Truck (thou cwt) 3/ 4/	8,006	8,298	8,762	10,990	8,180 P	8,454 P	8,541 P	9,771 P	10,197 P	11,270 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	115.5	116.1	113.1	112.3	114.9	115.0	115.1	115.1	115.5	115.4
Fleet operation (cts/mile)	115.3	116.7	113.6	112.6	115.2	115.2	114.9	115.0	115.8	116.0

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1986 and 1987. 5/ Office of Transportation, USDA. P = Preliminary.

Information contact: T.O. Hutchinson (202) 786-1840.



## Indicators of Farm Productivity

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### Table 39.—Indexes of Farm Production Input Use & Productivity

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(See the Jan.-Feb. 1987 issue.)

Information contact: James Johnson (202) 786-1800.

### Table 40.—Supply & Use of Major Pesticides

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(See the Oct. 1986 issue.)

Information contact: Stan Daberkow (202) 786-1458.

## Food Supply and Use

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### Table 41.—Per Capita Food Consumption Indexes (1967 = 100)

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(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.

### Table 42.—Per Capita Consumption of Major Food Commodities (Retail Weight)

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(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.



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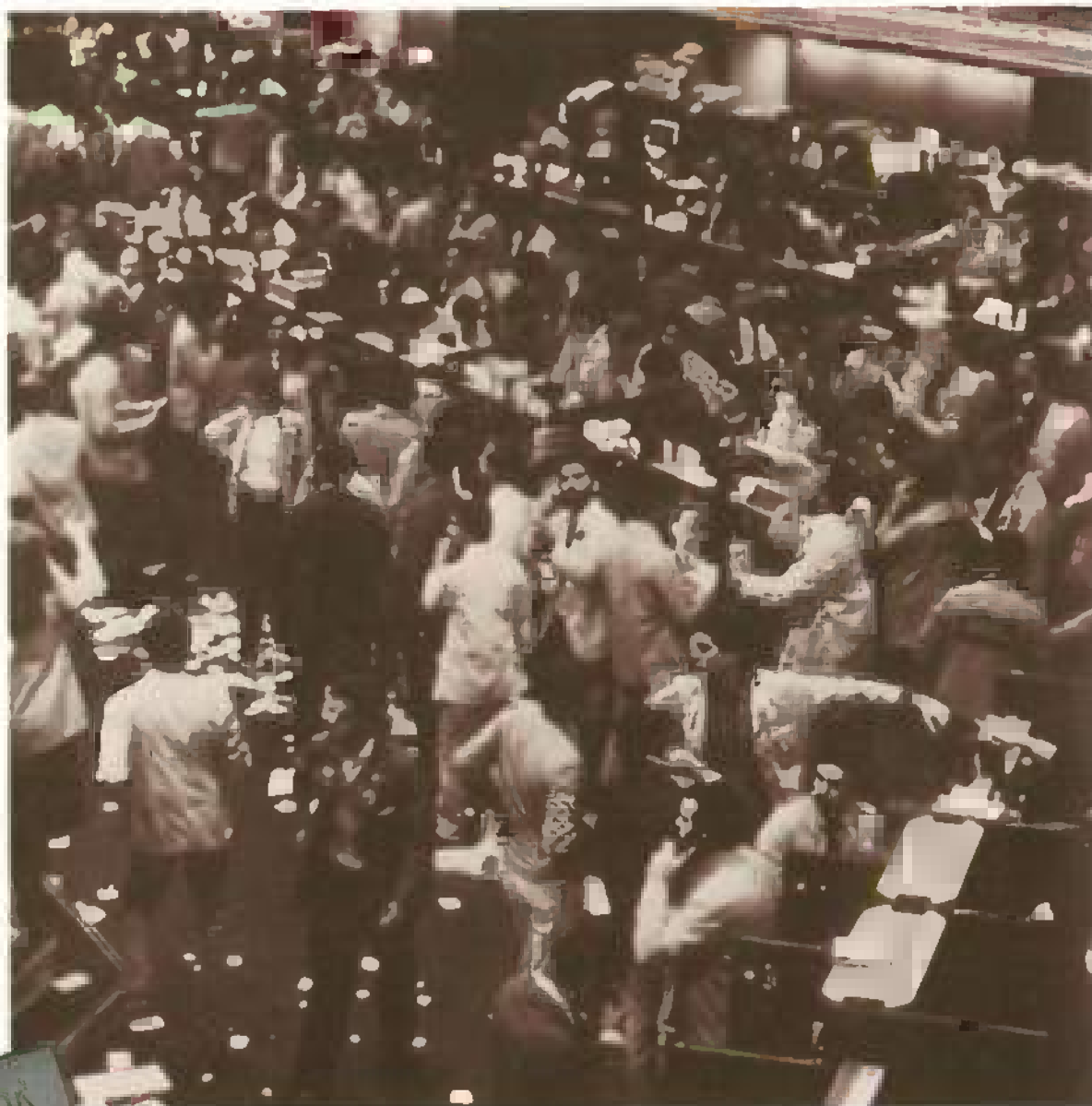
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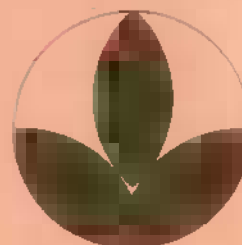
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